

Scientific BASKETBALL

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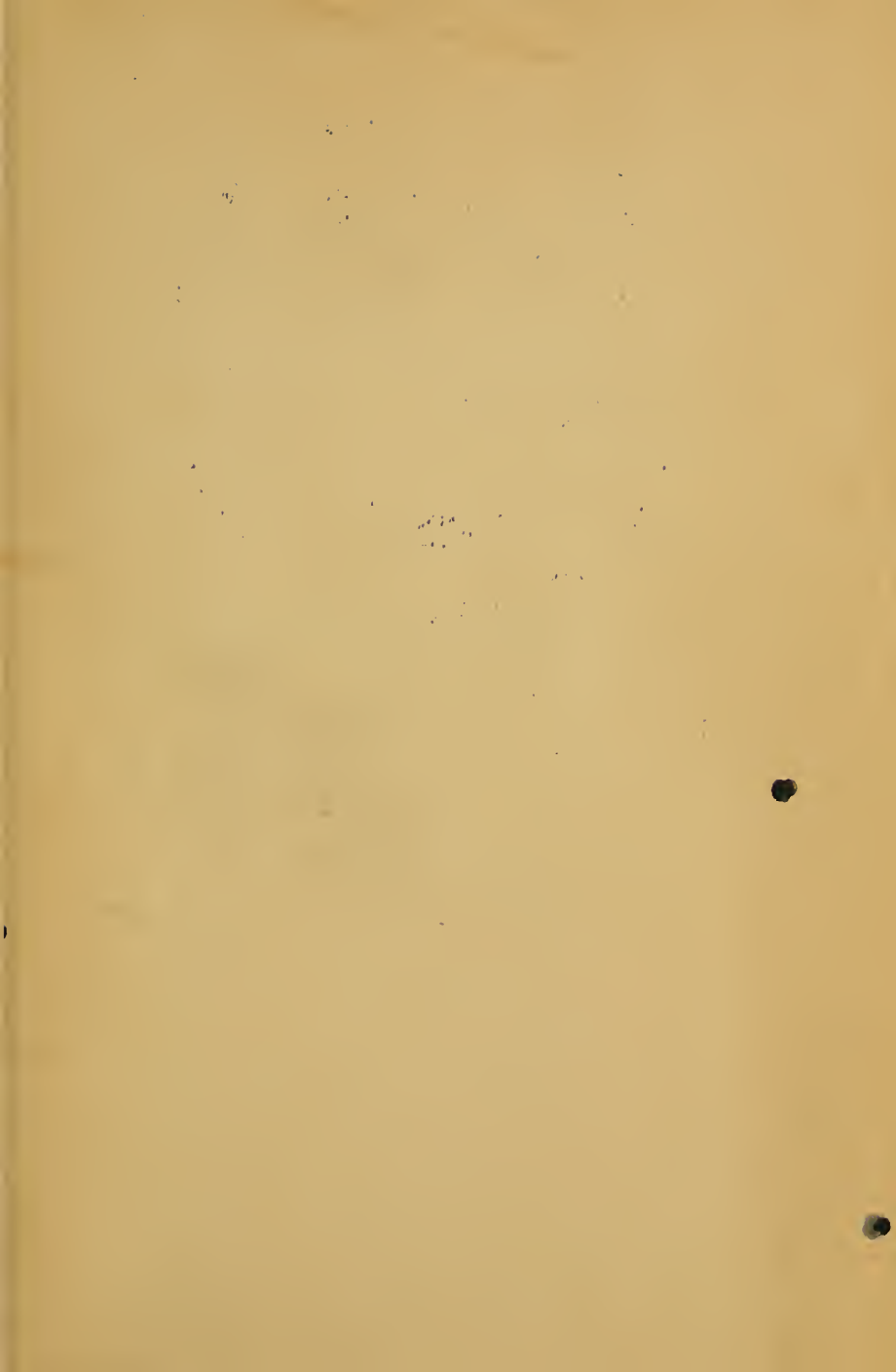
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SCIENTIFIC BASKETBALL

SCIENTIFIC BASKETBALL

*FOR COACHES, PLAYERS,
OFFICIALS, SPECTATORS,
AND SPORTSWRITERS*

HOWARD A. HOBSON
*Head Basketball Coach
Yale University*

NEW YORK

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To
My Wife
JENNIE NOREN HOBSON



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Preface

BASKETBALL IS NOW RECOGNIZED AS OUR MOST POPULAR winter sport. In spite of this fact, the game in many ways is still in its infancy. It is much younger than our other major sports, such as football and baseball. Probably for this reason, the rules of basketball have been changed rather frequently, and the game is still in the process of development. Very little has been done to analyze the game from a technical point of view. This is more true from the standpoint of scouting than from that of playing techniques. Most coaches today are well versed in the fundamentals of the game, and great strides have been made in developing offensive and defensive systems. However, in the execution of the various plays used, there have been very few standards by which to measure the exact success or failure of these plays and exact player and team performance. In a general sense, of course, we know when a team wins and when it loses; but measurement of the factors that contribute to the victory or the loss is not well established.

This entire situation might well be compared to our oldest game, baseball. In baseball a batter who has a .300 average is a good batter, and if he is able to do an average job of fielding, he will have a place on the team. This is known because thousands of cases have been studied, and a .300 average is accepted as a criterion of performance. By the same standard it follows that if a player is only able to bat .100 he cannot expect to play on a team because his defensive play cannot possibly compensate for such a great weakness in his batting. In the same manner, fielding averages, pitchers' averages, and many other baseball statistics have been worked

out so that standards of performance for a baseball player are well known.

Now let us compare this with basketball. It has been the practice, and it still exists in most situations, to credit the individual and the team merely with the number of points scored by goals from the field and from the free-throw line. About the only factors of the game that have been universally recorded, other than total points, have been personal fouls and, in some cases, free-throw attempts. An individual player may score twenty points in a game and yet shoot very poorly, depending on the type and number of shots that he attempts. The same may be true for the entire team. It also follows that a player who scores points may not be a great asset to his team if he does not contribute in other ways. For example, little attention has been paid to the number of times a player or a team loses the ball during a game through bad passes, violations, or poor ball-handling. Little attention has been paid to the number of interceptions that a player or team makes in a game, or to the number of times that a player retrieves a ball or a rebound from the backboard.

It is the author's intention that the material contained in this book show that the above-mentioned factors and others may be objectively measured, and that it will be possible to establish, by analysis, a relationship between these factors of performance and the success or failure of the individual player and of the team. The standards thus produced will be of importance to coach or player in connection with his own team and his opponent's.

The information on scouting of basketball is basic to the material in the chapters for the player, official and sports-writer. It is also basic to later chapters on fundamentals, plays, general coaching methods, problems, and strategy.

The author wishes to express deep appreciation to the following people for their assistance in making this book possible:

Players, coaches, student managers, and sportswriters throughout the country who have assisted in supplying data.

Dr. Harry A. Scott, Dr. C. L. Brownell, and Dr. E. S. Evenden of Columbia University for their invaluable suggestions, advice, and assistance during the entire preparation of the book.

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Miss Ethel M. Feagley, Columbia University librarian, for assistance in preparing the annotated bibliography.

HOWARD A. HOBSON

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SCIENTIFIC BASKETBALL

PART I

Foreword

IT IS THE PURPOSE OF PART I OF THIS BOOK TO PRESENT the results of a study of 460 college basketball games in which various performances were recorded. A period of thirteen years is covered, from the 1936-37 season through the 1948-49 season. College games from all sections of the country are included. Individual and team shooting is emphasized and all other measurable factors that may be accurately recorded during the progress of a game are also included. It is hoped that certain standards of performance will result from an analysis of this information and that coaches will receive helpful suggestions on how intelligently to scout and analyze their own players and teams as well as their individual and team opponents.

While college games were used, the findings are equally adaptable to all levels—from junior high and high school to the top professional teams.

"Scouting" is defined as "the observing, analyzing, and recording of all performances of both teams, the individual players, and the officials during the progress of the game." The values of these observations, analyses, and records for coaches, players, officials, sportswriters, and spectators are discussed fully. In addition, examples of scout reports and methods of scouting as well as complete forms and charts for analysis of scouting material are included.

Tables are used to list the results of the 460 scout reports. The reader is urged to give careful attention to these tables from which yearly, periodical and total findings are available for all objective factors of the game.

Chapter 1

The Game—Its History and Future

BASKETBALL IS AMERICA'S GREATEST CONTRIBUTION TO the sports field. It is the only major sport that is entirely American in origin. Basketball was invented in 1891 at Springfield College, Springfield, Massachusetts by the late Dr. James Naismith. Little did the inventor realize at that time that the game would develop to its present position in the field of national sports. It was his intention to introduce a game that could be played indoors with a minimum amount of equipment, to fill in between the major sports seasons of football and baseball. It was also his intention to eliminate bodily contact so far as possible, and thereby lessen the risk of injury prevalent in football.

Peach baskets were first used as goals and since there were no openings in the bottoms, the ball had to be retrieved by the use of ladders after each goal. Originally, there were nine players on each side but because of the congestion caused when eighteen players moved rapidly over a small area, the number was reduced to seven and finally to five.

Yale University really pioneered the five-man game. The first college game with five men on a team was played at Yale University between Yale and the University of Pennsylvania on March 20, 1897. Yale won the game 32-10 (see frontispiece).

The development of basketball since that time has produced other major rule changes that have greatly improved the game. At one time it was customary for the winning

team to hold the ball in the back court to "stall out" the remaining time. To eliminate this the ten-second rule was introduced, making it necessary for a team to advance the ball across the center line within ten seconds, or relinquish the ball to their opponents. This change did much to speed up the game and gave the trailing team a better chance. Another major change that noticeably affected the game was the elimination of the center jump during the seasons from 1936 until 1938. Up to that time it was the practice to have a tip-off between the two centers after each free-throw goal or field goal. The scoring team now relinquishes the ball to its opponents after each goal. This change has popularized the fast break and has greatly increased scoring. It also meant that tall men, used mainly to secure the tip-off, had to be better all-round players to earn a place on the team.

Another major change prohibits any offensive player from standing in the free-throw lane for more than three seconds. This opens up the area under the basket and also prevents tall men from standing directly under the basket where they formerly scored by "dunking" the ball into the basket.

These and other rule changes have made the game a five-man shooting contest. For example, one player formerly shot all the free throws for his team. Now, the fouled player shoots the free throw and all have an opportunity to score free-throw points. The changes that have speeded up the game and brought the fast break into prominence have also made it possible for all the players to participate in the scoring. This has added great interest to the game, for both players and spectators.

There will no doubt be further changes which will improve the game as basketball is still very much in the developmental stage. Although the game has been played since 1891, it was in the mid-thirties that it became a prominent major sport in most parts of the country.

Interest in basketball has been particularly great since Mr. Ned Irish conceived the idea of bringing college basketball into Madison Square Garden in 1934-35. The tremendous publicity given to these New York games, the intersectional interest, the All-America selections, and the National Tournaments, effected a country-wide growth and interest in basketball. It is now estimated that over 20 million people play basketball each year in the United States. Over 318 million fans bought tickets to their favorite sports events in 1949. Of these, 105 million or 33 percent were for basketball games.¹ Basketball far surpasses any of our other major sports in both participation and spectator attendance.

Basketball has become a major part of all physical education programs and is played by many boys and girls recreationally on a non-competitive basis; it is one of the leading intramural sports in school programs; and it is played on a highly competitive basis by high school, college, amateur, and professional teams throughout the country. The game was also one of the chief conditioning and recreational sports used by our Armed forces during World War II. For example, in 1944 there were more than 2,000 American service teams playing basketball in Great Britain and approximately 1,500 in Italy. As a result, interest in the game increased greatly throughout the world. In the 1948 Olympics many countries looked to America for coaches and leaders to help them with the game. Of approximately thirty teams participating in the 1948 Olympics, several were coached by Americans. It is quite possible that in the near future basketball will be the leading international sport.

The future of basketball in this country is truly great. Improvements in transportation are making intersectional games possible for many teams. For example, in 1946-47 the Uni-

¹ Figures through the courtesy of Ray Bethers and *THIS WEEK* magazine.

versity of Oregon team played two games in New York and were away from school only five days, missing only two days of classes. In 1948-49 the Yale University team played two games in San Francisco during vacation and made the trip in six days. Both trips, of course, were made by air.

The widespread interest in the game has caused many large structures to be built to accommodate large crowds. At the present time construction is underway for many buildings which will seat up to 20,000 spectators each. This will rival the already customary attendance at Madison Square Garden. Out-of-doors facilities are also being developed rapidly and the game is becoming a year-round sport in many sections.

This great future that is predicted for basketball, including intersectional and international competition, is important to all interested in the game. It certainly indicates the need for greater study in order that the game's fullest possibilities may be realized.

VALUE OF SCOUTING

"Scouting" is a term which is used in athletics with various meanings. In basketball the term is used in a broad sense. Basketball scouting is the observing, analyzing and recording of all performances of both teams, the individual players and the officials during the progress of the game. The results of scouting include objective data that are recordable and productive of averages and percentages. They also include subjective observations on styles of play or similar factors. These cannot be as accurately measured or reported as the objective factors but are probably of equal importance. Scouting also includes observations regarding one's own team as well as the opponents.

The information received about a thoroughly scouted game should be of value to all interested in and connected with basketball in, of course, different ways. Some of these values are as follows:

VALUES FOR THE COACH

First, let us consider the values of objective observations in scouting an individual player. Among the factors of the game that can be measured objectively are field-goal attempts and field goals from various locations, free-throw attempts and free-throw goals; recoveries such as offensive and defensive rebounds, recovered jump balls and interceptions; losses-of-ball due to bad passes, violations, and poor ball-handling; personal fouls.

The field-goal data alone are of great value to the coach. If his players are shooting below the accepted average some change may be necessary in their fundamental work. If an opponent is able to score only from certain areas or to score only certain types of shots, this fact has valuable implications as to how to play against that opponent. For example, if an opponent has a big center and the charts indicate that he can score only in the short area close to the basket, the defensive center may run back to the keyhole and wait for him, knowing probably that he will not take a long shot. If the scout report shows his style of shooting and he shoots only with his right hand, he may be played accordingly. The scouting data may indicate that a star guard on the opposing team is very fast and takes shots under the basket but cannot shoot from a long distance. The defensive player, therefore, can play him loose and prevent him from using his speed. If, on the other hand, reports indicate that a player is a good long shot he will have to be played accordingly. Often scout reports indicate that a player does all or most of his shooting from one side of the court. Knowing this is an aid to the defensive player in getting back to a proper position and also in playing the offensive man on a particular side.

Objective free-throw data are valuable mainly for instructional purposes. An analysis of free-throw percentages is a necessity for intelligent correction or suggestions.

Rebound data are particularly valuable for indicating the strong rebounders on your own and the opposing team. The use of such data is the only way to know what your own players are doing and it will lead to better instruction. Knowing the strong rebounders on the opposing team will enable a coach to devise means of screening out these men and making them less effective.

Information on other recoveries such as jump balls retrieved and interceptions is also of value. This information helps the coach to combat the opponents' strong retrievers and to strengthen his own players in this particular department. Retrieving a jump ball toward the end of a close game is worth a little time and effort. It may set up the winning goal.

Loss-of-ball data are extremely important for instructional purposes. A player who constantly travels with the ball or makes bad passes will more readily correct his errors if the number of times this occurred during a game can be pointed out to him. Advantages may also be gained by knowing of opponents who have bad habits in this regard. For example, an uncertain passer may be pressed by the defense, causing him to lose the ball more frequently.

Personal foul data are commonly utilized by coaches for instructional purposes. It is also of value for a coach to know which opponents foul most frequently so that strategy may be planned accordingly. Naturally, offensive threats should be directed toward defensive weaknesses. A player who fouls repeatedly on defense may be a key offensive man. If so, the offense should be directed toward him. Under the present rules, if a key player has three or four fouls, a smart opponent will put him on the spot, running plays at him repeatedly until he fouls out. Personal foul data are an important part of any scout report and much strategy may result from it.

Objective team data may be obtained by computing the totals of individual records. For the coach's own team, the total picture will show not only the team average but whether

the team in general is failing to drive in for the basket, is taking bad shots, or is failing to take advantage of known defensive weaknesses in certain areas. In many games we reviewed the charts at the half and discovered that our team had taken only three or four shots the entire half in the short area. Naturally, this means that the team was not taking advantage of plays going into the basket, or that they were not feeding the post man properly, or possibly that the offensive rebounding was off.

There is nothing more valuable in planning an attack against an opposing team than knowledge of that team's general shooting ability and styles of performance. Charting a team will indicate whether it is a free-shooting, or a conservative "percentage" shooting team. Some teams have shot at the basket as few as 18 times in a game, while others have shot as many as 132 times. In the first example, a coach would naturally play a pressing defense, if behind, in order to make the other team shoot and play ball. In the second example, a team could safely play loose away from the ball, knowing that shots would be taken without much encouragement. When a team is shooting freely at the basket it is probably employing a fast break, which means that the defensive team may wish to sacrifice offensive rebounds and get the defensive men back fast. An example may be used to illustrate these points.

Several years ago, one of the University of Utah's fine teams played the University of Oregon. Not having seen them play previously, Oregon knew little about their offense. At the half, the charts indicated that they took only one-hand shots, and that very few shots were taken in the long-shot area. With a slight lead, Oregon played a keyhole defense the second half, resulting in a 51 to 15 victory for Oregon. The strategy was entirely guided by information on the opposing team's shooting pattern taken from the first-half shooting charts. Usually, charting an opposing team several times

will present a good picture as to its general performance in shooting.

Now let us consider the values of subjective scouting observations. A report should be made on each player, and it should include such factors as size, speed, aggressiveness, competitive ability, endurance, temperament, and defensive ability. These observations are just as valuable as the objective ones in coaching individual players and planning the play against individual opponents.

Subjective *team* observations are of course one of the foundations for coaching a basketball team and for planning the attack against opponents. Certainly the coach must be able to observe his plan of offensive and defensive team plays and organization. He must be able to decide which are functioning and what adjustments need to be made during the progress of the game. He must also be able to take from this subjective scout report information that will be helpful in future games. Shall a fast break be used for the entire game? Shall a pressing man-to-man defense or a zone defense be used? Are the out-of-bound plays being utilized? Is the team rebound organization functioning? These observations and many others are accurate only if scout reports and records are kept.

Subjective observations about the opposing team are of equal importance. What offensive plays and tactics do the opponents use? What measures shall be employed by the defensive team to stop them? Do the opponents use a man-to-man, zone, or combination defense, and how do they use it? What offensive plan will best attack the opponents' defense? Obviously these subjective team observations are invaluable to any coach.

Still other phases of both objective and subjective scouting include the performance of individuals and teams on home courts as compared to visiting courts, during the first half as compared to second half which involves endurance, for

example, or performance in practice games as compared to major games. Information of this kind is extremely valuable in the conditioning of both players and teams and in the psychology of coaching.

VALUE FOR PLAYERS, OFFICIALS, SPORTSWRITERS, SPECTATORS

The players

In one sense, the player is the ultimate recipient of all scouting information. Scouting is conducted chiefly for the purpose of improving individual and team play. Aside from this, however, it has unique values for the player. First, the player benefits from all objective scouting data because the information may help him to improve his game offensively and to play more scientifically against his opponent defensively. Before scouting was thought of in basketball, it was the rule for a player to analyze his opponent during the early part of a game so that he could play accordingly. Objective scouting merely eliminates the guess work. Second, the player benefits from subjective scouting data through conferences with the coach and through an analysis of this part of his game. Third, the player benefits through self-testing and rating which is a form of scouting. There are many factors that contribute to making a successful basketball player. An analysis of these factors by the player himself, as well as by his teammates and the coach, will be invaluable.

The officials

Scouting an official is comparatively new in basketball, but it is important. Because of the unique position of the basketball official as compared to officials of other sports, it is essential that the work of the official during a game be recorded, analyzed, and rated. The results through proper follow-up work should be valuable to every official. This scouting and

rating may be done by representatives from official bureaus or associations, coaches, or other competent observers.

The sportswriter

Basketball owes much of its popularity to the publicity that has been given to the game through channels such as the press and radio. Sportswriters have not had a great deal of objective data to report to the public. Many have expressed a desire to have more of this information. Certain parts of the scout reports which may be kept conveniently by sportswriters or reporters themselves such as field-goal attempts, losses, and recoveries, will be of great value in reporting games to the public.

The spectator

Similarly, objective data will give spectators a better appreciation of the game. Scouting information will make it possible for spectators who like to keep score at games to do so more intelligently, and forms may be made available to them so that other data may be tabulated if desired. Actually this is of benefit to many fans because it relieves unnecessary nervous tension during games.

Chapter 2

A Complete Game Scout Report

THE SCOUT REPORT ILLUSTRATED IN FORM A, PP. 14-21, gives a complete picture of the objective and subjective observations during a complete game. On the front of Form A all of the objective data are reported. The back of the form gives all subjective observations during the game. These minimum essentials are included:

1. *Objective Data (Individual)*

- (a) Long field-goal attempts and goals scored
- (b) Medium field-goal attempts and goals scored
- (c) Short field-goal attempts and goals scored
- (d) Total field-goal attempts and goals scored
- (e) Free-throw attempts and goals scored
- (f) Loss of ball
 - 1) through violations
 - 2) through poor ball handling
 - 3) through poor passing
- (g) Interceptions
- (h) Tie-ups
- (i) Jump-ball recoveries
- (j) Offensive rebound recoveries
- (k) Defensive rebound recoveries
- (l) Assists
- (m) Personal fouls
- (n) Points-responsible-for
- (o) Total points

HALF SCORE (32) FINAL SCORE (64)

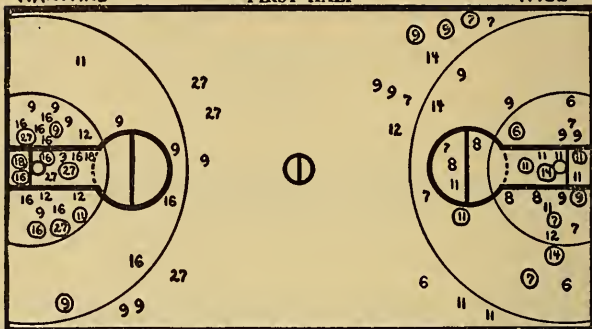
DATE MARCH 13, 1948 PLACE YALE

REFEREE **B**EGOVICH

HARVARD

FIRST HALF

YALE



RUNNING SCORE HOME TEAM (**YALE**) Time Out **!!!**

Running Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Player Scoring	11			11	8	11	8		9		7	11		6		7	11		11		9		14	14	8	8		9	
Time of Score	19½			18	17	16½	16		15½		15	14½		14		12	11½		10		9		8	8	5½	5½		3	

Running Score	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58
Player Scoring	14	7		8		8		6		14		14		8	8		14	9		8		6	7	7		8	12	7	
Time of Score	1½	½		1½		17		16		14		13		12½	12½		11	10½		6		5½	4	4		3½	3½	2	

[illegible]

PLAYER	NO	TIME PLAYED	SUMMARY OF SHOTS															
			LONG			MEDIUM			SHORT			TOTALS		PCT	FREE THROWS			
			S	M	F	S	M	F	S	M	S	M	S		M			
YALE																		
LAVELLI	8	33	2	0	5	1	11	4	18	5	278	11	5					
NADHERNY	14	30	1	0	9	5	4	2	14	7	500	2	1					
ANDERSON	11	17	2	0	2	1	7	2	11	3	273	3	3					
JOYCE	9	39	4	2	3	0	8	1	15	3	200	1	1					
JOHNSON	4	1	0	0	0	0	0	0	0	0	000	0	0					
PEACOCK	7	32	7	1	4	1	3	1	14	3	214	6	3					
REEDEN	6	35	4	1	3	1	4	2	11	4	364	0	0					
FITZGERALD	12	13	1	0	1	0	1	0	3	0	000	2	1					
TEAM TOTALS		200	21	4	27	9	38	12	86	25	291	25	14					

PLAYER	NO	TIME PLAYED	SUMMARY OF SHOTS												FREE THROWS	
			LONG				MEDIUM				SHORT		TOTALS			
			1	2	3	4	5	6	7	8	9	10	5	6		
HARVARD	27	30	4	0	4	0	9	4	17	4	235	5	4			
HAUPTFUHRER	16	34	1	0	3	0	15	3	19	3	158	2	1			
ROCKWELL	6	1	0	0	0	0	0	0	0	0	000	0	0			
DAVIS	18	30	0	0	2	0	11	5	13	5	385	4	2			
PRIOR	9	25	4	0	6	1	7	1	17	2	118	4	2			
MCCURDY	12	37	0	0	3	2	4	0	7	2	286	4	3			
BRADY	7	3	0	0	1	0	1	1	2	1	500	2	1			
CROSBY	11	34	0	0	2	0	2	2	4	2	500	3	1			
GANNON	14	6	0	0	1	0	2	0	3	0	000	1	1			
HENRY																
TEAM TOTALS		200	9	0	22	3	51	16	82	19	232	25	15			

S = Shots attempted

B = Baskets made

FORM A

A Complete Game Scout Report

7th TEAM HARVARD

HALF SCORE (27) FINAL SCORE (53)

UMPIRE SCHOENFELD

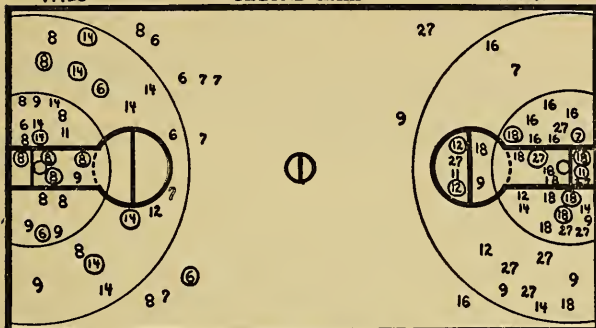
TIMER DESMOND

SCORER ARNOLD

YALE

SECOND HALF

HARVARD



RUNNING SCORE OPPONENTS (HARVARD) Time Out. / / / /

Running Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Player Scoring	27	27	9	16	27	16	9	12	11	18	18	27	27	16	12	11	27	18											
Time of Score	19	18½	17½	15½	13	9½	8½	7	6	5	5	4	3½	2½	2	1	½	17½											

Running Score	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58
Player Scoring	12	18	27	27	18	16	12	18	18	12	9	11	9	7	14														
Time of Score	18	17½	16½	15½	15	14½	9	8	8	7½	7	5	4½	3	3	½													

Running Score	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87
Player Scoring																													
Time of Score																													

LOSS OF BALL			RECOVERIES						3	ASSISTS	PERSONAL FOULS	POINTS RESPON SIBLE FOR	TOTAL POINTS
PASSES	VIOLATION	BALL HAND	INTER CEPTIONS	TIE UPS	JUMP BALL	BACKBOARD							
						OFFENSE	DEFENSE						
1	0	3	6	2	0	7	10	2	2	10	15		
0	0	2	3	0	0	7	10	2	3	7	15		
1	1	1	2	0	2	5	0	1	1	3	9		
2	0	0	2	2	1	11	10	1	2	16	7		
0	0	0	0	0	0	0	0	0	1	2	0		
1	1	1	1	1	1	2	4	4	5	8	9		
2	0	1	4	2	1	3	5	4	6	8			
3	0	0	0	0	2	0	3	1	1	1	1		
10	2	8	18	7	7	33	43	16	19	53	64		

LOSS OF BALL			2		RECOVERIES		5		ASSISTS	PERSONAL FOULS	POINTS RESPON SIBLE FOR	TOTAL POINTS
PASSES	VIOLATION	BALL HAND	INTER CLPTIONS	TIE UPS	JUMP BALL	BACKBOARD						
						OFFENSE	DEFENSE					
1	1	1	4	0	0	10	12	1	3	6	12	
0	1	2	3	0	0	7	5	1	4	20	7	
0	0	0	0	0	1	0	0	0	0	0	0	
1	3	0	1	3	1	10	4	1	2	6	12	
2	0	1	3	0	0	0	3	1	0	8	6	
6	2	0	2	0	0	1	7	3	5	7	7	
0	0	1	1	0	1	1	0	1	0	2	3	
1	1	1	1	0	1	3	2	5	10	5		
1	0	0	1	0	1	0	0	1	3	5	1	
12	8	6	18	3	5	30	39	11	22	64	53	

FORM A

A Complete Game Scout Report
(cont'd.)

2. *Objective Data (Team)*

- (a) Team totals for each of the individual items on p. 13
- (b) Team shooting percentages and averages for long, medium, and short shots, and free throws
- (c) The running score

In regard to objective information, some coaches will wish to include more extensive material, such as style of shots attempted and scored; first and second half divisions; points-responsible-for; assists; shots taken and scored as a result of certain styles of play, such as the fast break or set plays. Additions of this kind may be easily kept by using symbols.

Tie-ups, assists, points-responsible-for, and running score are not a part of this study but are mentioned and described briefly because they are recognized as a part of a complete scout report. All other items included in Form A are treated thoroughly later.

A tie-up occurs when a player causes a held ball to be called by gaining partial possession of the ball while it is the control of an opponent.

An assist may be credited to a player when he makes a pass that contributes directly to a field goal. Since this is a matter of judgment, the assist is not entirely an objective item.

Points-responsible-for are charged to the defensive player when his man scores a field goal or when a player fouls an opponent and the latter scores from the free-throw line.

The running score gives valuable information. A diagonal line is drawn through the proper number each time a score is made. The jersey number of the scoring player is placed beneath the score number. The time remaining in the half is placed beneath the number of the player scoring. This information will show which team is leading at any time during the game. It also indicates consistency in scoring by players and teams.

3. *Subjective Observations*

(a) Team offense and opponent's defense.

It is suggested that these two major items be scouted and recorded together. This includes offensive formations, positions of players, methods of bringing the ball down the court, and all set-play patterns. It also includes the manner in which the defensive team gets back to position and the opponent's styles of team defense.

(b) Team defense and opponent's team offense. This is the reverse of (a).

(c) Jump-ball plays (both teams)

(d) Rebound organization (both teams)

This includes team rebound organization by both teams on the offense and on the defense. It also includes any particular rebound strategy or plays that may be used.

(e) Free-throw organization

Observations should be recorded on free-throw information of both teams on offense and defense. Any plays or strategy employed following free throws should also be recorded.

(f) Out-of-bounds plays (both teams)

This includes both the offense and defense on all out-of-bounds situations; team organization and plays of both teams; situations where the ball is taken out-of-bounds under a team's own basket, under the opponent's basket, or on the sides of the court.

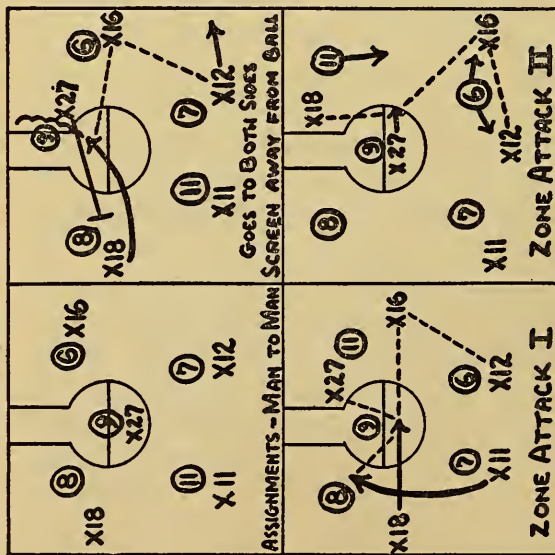
(g) Personnel (both teams)

If it is not already known, this should include the height, weight, class, and age of each player; and all individual observations of the player in this particular game, such as speed, defensive ability, and offensive ability. A good personnel report is as valuable as any part of the scouting report in basketball.

(h) Officials

A brief report regarding the work of the officials in the game should be included.

VISITING TEAM OFFENSE



HARVARD OFFENSE — YALE DEFENSE

Harvard started their three big men so we played a man to man pressing defense all over the court at the start of the game. However, all five men did not do this so much of the effectiveness was lost. Later in the first half we played a standard man to man defense and dropped a man back to take care of Rockwell who was breaking down fast for them. They did not use a regular five man fast break but sent Rockwell and Cannon down ahead fast and used long passes. They always bring the ball up the court and it is really not necessary to press them in order to make them play a fast game. Harvard scored very little on the fast break and depended mainly on their set play attacks. Against our man to man defense they used a single pivot but did not use the same man in the pivot all the time. Prior started in this position and later Hauptfuhrer and Rockwell played the position. They used standard plays off of this formation and like to screen away from the ball. We played loose and changed men on this particular play which was quite effective. However, they did score off these plays some and particularly on rebounds. They had far too many close shots at the basket in this game. For this reason, we should have changed to our zone defense at the half, as they were taking very few long shots, and not making any of them. When they continued to get too many short shots in the second half we finally did change to a zone in the middle of the half, and it was quite effective. They used two methods of attacking the zone. The first was to break a man into the key as indicated in Diagram 1. Later they put a man on the key and tried to pass the zone out of position, as indicated in Diagram 2. When they did this, we shifted into a loose man to man defense. Harvard is a dangerous team in close and our individual defense was poor. We made many unnecessary fouls and should work on this part of our game. Harvard hit a very poor average from the field or they would have made the game much closer.

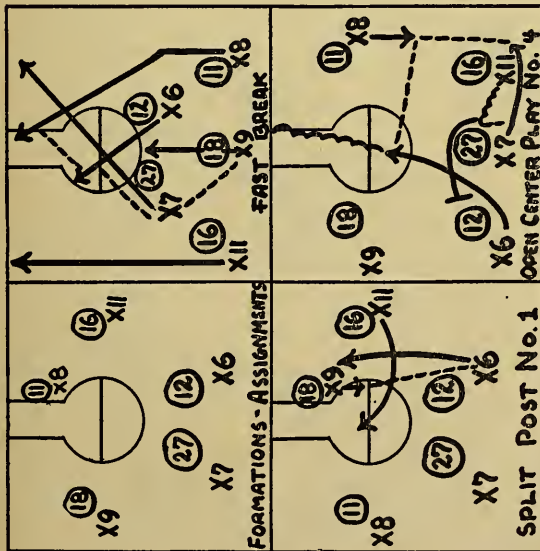
FORM A

Reverse side

(Part 1)

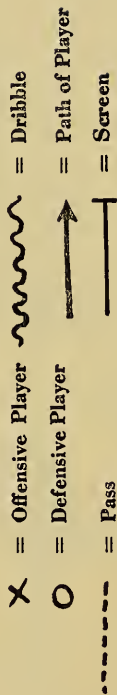
HOME TEAM OFFENSE

VISITING TEAM DEFENSE



YALE OFFENSE — HARVARD DEFENSE

Harvard used a man to man defense the entire game. In their assignment there was one major difference since the last game. They played Cannon against Lavelli in the bucket. This meant that Hauptfuhrer played opposite Peacock and Peacock was able to drive in for several scores. Harvard played a tighter defense also and did not drop off away from the ball as much. This made our center attack good. We used a standard fast break most of the game. We stressed driving hard and having Anderson and later Nadherny hitting the end line and breaking back out to meet the ball. Of the 32 points we scored in the first half, at least 20 were made on the fast break. We would have made more had we hit a higher average. We had 43 attempts but made only 12 baskets. Harvard recovered better to stop our fast break than they did in the first game, but we were still able to get a number of two on one and three on two situations. On the set plays we used the single pivot the entire game, except the last four minutes when we went into a ball control game to protect our lead. No. 1 was our best scoring play and we used it to both sides effectively. The second cutter is usually open when we split the post. In the ball control game we scored two baskets on No. 4 down the center. We also used the same play to the other side but Cannon loosened to the center and stopped it, and Lavelli did not cut for the basket. We still do not use the proper option on our set plays and depend too much on the fast break. Harvard pressed down the court on the defense in the second half some. We used the long pass game effectively when they did this. A mediocre performance in shooting from the field and also from the free throw line prevented us from making a higher score.

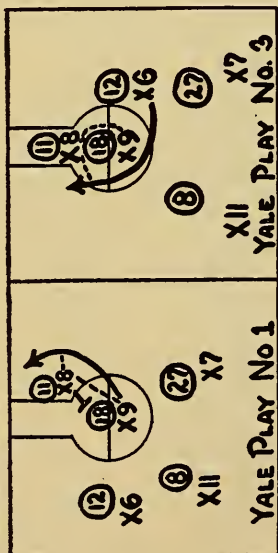


FORM A

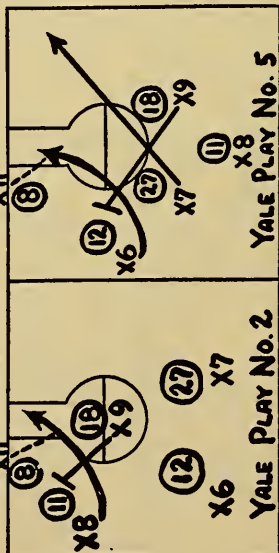
Reverse side

(Part 2)

JUMP-BALL PLAYS



OUT-OF-BOUND PLAYS



JUMP-BALL PLAYS

When we were in scoring territory and controlled the tip we used No. 1 twice and later No. 3. We scored directly on No. 3. On most of the jump balls Harvard controlled the tip because of superior height. Against this we rotated three men keeping a safety man back. Harvard used no apparent jump-ball plays, but usually tipped to the right side. We were able to gain a slight advantage on all jump balls 7 to 5.

REBOUND ORGANIZATION

Harvard rebounded all three of their big men on the offensive board and they did this very well. They did no obvious cross screening but got position very well and particularly Hauptfuhrer and Prior hurt us in this department. Harvard rebounded all five men defensively but did not attempt to screen out our big men. Our rebound organization was standard. We rebounded 3 men offensively and at times four. However, later in the game we had to drop men back to stop their break and at times rebounded only Lavelli and Joyce. Defensively, we did a poor job in screening out their big men. Our guards did not do a good job in this department.

FREE-THROW ORGANIZATION

Harvard used a long pass break after free throws that caught us twice. We should have two men back. They rebound very well on missed free throws with their big men. They made three baskets in this manner and we will need to correct this in the next game.

OUT-OF-BOUNDS PLAYS

We used No. 2 and No. 5 twice each and scored once on No. 5. We used no side out of bounds plays, as they did not play us tight. Harvard did not use any apparent out of bounds plays. We zoned the area under the basket which may have discouraged them using the plays they used against us before.

FORM A

Reverse side

(Part 3)

PERSONNEL — YALE: LAVELLI

A bad first half. Was off on his shooting and not aggressive on the boards. However, did play a very fine second half, finishing at fifteen points, playing a good defensive game and getting at least half of our rebounds. Had worst game of season at free throw line but finished season with 80%. Still needs to work on individual defense but much improved.

ANDERSON

Still handicapped because of wrist injury. Played aggressive game but had trouble with Cannon defensively. Is slow in recovering on defense.

NADHERNEY

Played a fine second half. Hit baskets when they counted. Is fine competitor. Floor game must improve as well as defense.

JOYCE

Needs to concentrate on shooting. Must practice this a great deal to be a consistent scorer. Played better on boards and is improving.

PEACOCK

Played a good first half. Then took shots he didn't have in second half. Fouled out by committing unnecessary fouls. Goes after ball on dribble when there is no chance.

REDDEN

A fine defensive game. Needs to have more confidence in shooting. Called time-outs at proper time and did a good job in leading team.

FITZGERALD

Not confident enough in shooting and needs to develop drive. Can be a fine player.

JOHNSON

Only in the game one minute. Committed a foul by weak defense. Could be a good player with hard work.

FORM A

Reverse side

(Part 4)

PERSONNEL — HARVARD: HAUPTFUHRER

Six feet, five inches, 210, good man on both boards, good defensively for big man. Will shoot out in second area but not in third area. Shoots mostly with right hand. Has good fakes.

ROCKWELL

Fast. Leads fast break. Six feet, 3 inches, 190, left-handed. Shoots mostly with left and goes to left. However, will shoot from outside as well as inside; only fair defensively. Very dangerous offensive player.

PRIOR

Six feet, 6 inches, 220, very effective on both boards. Very aggressive. Offensively, a threat mainly in first area. Fair defensively for big man.

BRADY

Five feet, 10 inches, 170, very aggressive and fair defensive player. Fouled out mainly because of aggressiveness. Shoots mainly from second area. Seems to be sparkplug of team.

CANNON

Six feet, 1 inch, 180, football player. Very aggressive. Fast. Left-handed. Uses left-handed hook shot. Played pivot man defensively and plays to the side and in front. Did fairly good job on Lavelli.

HENRY

Six feet, 170, replaced Cannon. Played pivot man defensively. Aggressive but not as good defensively as Cannon. Fouls easily.

CROSBY

Five feet, 10 inches, 160. Replaced Brady. Is good shot from foul area. Fairly fast. Fair on defense.

DAVIS

Six feet, three inches, 180. Replaced Hauptfuhrer. Played in

(Continued on next page)

pivot. Shoots with either hand. Did not appear to be rugged on boards or strong defensively.

McCURDY

Six feet, 160. Shoots from in and out. Good set shot, off in this game. Shoots very freely. Always dangerous. Fair defensive player.

OFFICIALS — BEGOVICH

Excellent game. Followed ball well and used good judgment. Called plays quickly and decisively.

SCHOENFELD

A good game except interpretation on travelling. Did not allow shooter to lift pivot foot in shooting. In the main, however, used good judgment and game under control at all times.

GENERAL COMMENTS —

SUGGESTIONS FOR FUTURE GAMES

Harvard is big and aggressive. Condition is an important factor and we did not keep up a fast pace all the way in this game. Mentally, we were keyed too high for this game—not necessary against a traditional opponent. Players seemed nervous and over anxious entire first half—settled down in second half. Harvard may zone more next game with big men—be ready for this. Against man to man we need to develop better side attack against them as they concentrate defense in key area. Defensively assigned man to man seems best but we must play it much tighter next game. They are a free shooting team and must be picked up clear out to center of court.

In this game we coasted with 12 point lead in second half and they caught us. Harvard has hard fighting team and do not give up easily. Can't let up against them.

(i) General comments—suggestions for future games.

This may include any observations not covered in any other items, such as condition of the court, lighting conditions, psychological factors, general observations of different stages of the game, and "pep" talk reactions.

Since the report includes all information found in a score book, it may be used as an official score record. But the official score book should also be kept to minimize possibilities of error.

A more detailed explanation of the procedure used in obtaining these data follows. This type of report and the following procedure were used in securing the data for the 460 college games upon which many of the suggested scouting principles in the book are based.

Chapter 3

Scouting Methods Employed

OBJECTIVE DATA ARE OBTAINED THROUGH THE USE OF charts kept by expert observers. There are several plans which may be used, but it is best if three trained observers are used to keep the records during a game. Student managers or others familiar with the game may easily do the observing since it is an entirely objective process.

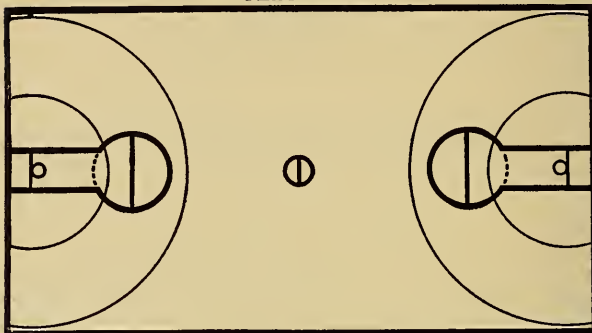
It is suggested that one observer record all field-goal attempts and field goals for both teams. This may be done by using a chart as illustrated in Form B on pp. 24-25. It will be noted that the scoring area is divided into three parts: the short area includes shots out to a radius of twelve feet from the basket; the second, or medium area, includes shots from a radius of twelve to twenty-four feet from the basket; the third, or long area, includes shots farther than a radius of twenty-four feet from the basket. Other areas may be included, such as right and left side of the court. The techniques are simple. If a player takes a shot at the basket, merely record his number on the chart at the position from which the shot was taken. Tip-ups and blocked shots count as attempts. If the shot is successful, the number is encircled. If more detailed data are desired, such as the style of shot or a shot resulting from a certain style of play, additional symbols may be used. The shot observer may also keep the running score for both teams.

The second observer should tabulate rebounds for individual players of both teams. This again is a simple procedure.

SCOUTING METHODS EMPLOYED

TEAM _____ HALF SCORE () FINAL SCORE ()
 DATE _____ PLACE _____ REFEREE _____

FIRST HALF



RUNNING SCORE HOME TEAM () Time Out.

Running Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Player Scoring																													
Time of Score																													

Running Score	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58
Player Scoring																													
Time of Score																													

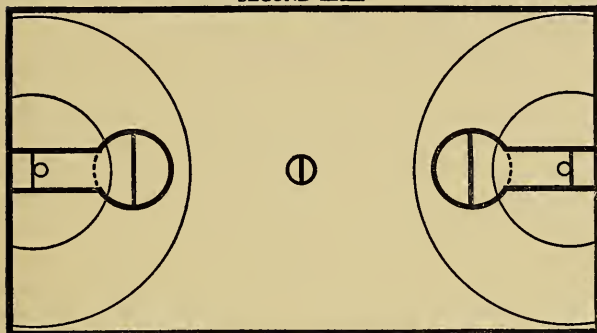
Running Score	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87
Player Scoring																													
Time of Score																													

FORM B

Basketball Scoring Form
 (To be kept by first observer.)

Form C on page 26 is suggested. The observer merely records a tally each time a player retrieves an offensive or defensive rebound. An offensive rebound is one which is retrieved from a player's own basket. A defensive rebound is one that is retrieved from the opponents' basket. An observer may check the accuracy of his figures, since the total number of rebounds should be approximately equal to the number of missed field-goal attempts and missed free throws less missed free throws when the ball is dead following the attempt. For example, if team A shoots at the basket sixty times and succeeds fifteen times, there will be forty-five rebounds at that basket from field-goal attempts alone. If team A attempts twenty free throws and makes ten, there will probably be an additional

vs. TEAM	HALF SCORE ()	FINAL SCORE ()
UMPIRE	TIMER	SCORER
SECOND HALF		



RUNNING SCORE										OPPONENTS ()										Time Out.....									
Running Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Player Scoring																													
Time of Score																													
Running Score	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58
Player Scoring																													
Time of Score																													
Running Score	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87
Player Scoring																													
Time of Score																													

FORM B

Basketball Scoring Form
(cont'd.)

ten rebounds, or a total of approximately fifty-five offensive and defensive rebounds at that basket.

Occasionally a missed free throw is a dead ball and there is no rebound. This may occur on the first free throw when two are awarded or on a missed free throw awarded for a technical foul. All other missed shots result in rebounds.

When a rebound results in a held ball, the *team* finally retrieving the jump ball should be given a rebound recovery. In case a shot goes out-of-bounds without hitting the backboard the opposing *team* is credited with a rebound. In these latter two cases they are recorded as *team* rebounds rather than individual.

The third observer should record losses-of-ball by players of

	OFFENSIVE	DEFENSIVE
TEAM		
PLAYER NO.		
TOTALS		

	OFFENSIVE	DEFENSIVE
TEAM		
PLAYER NO.		
TOTALS		

FORM C

REBOUND FORM

(To be kept by second observer.)

	LOSSES			RECOVERIES		
	Passes	Violation	Ball Hand.	Interceptions	Tie-Ups	Jump Ball
TEAM						
PLAYER NO.						
TOTALS						

	LOSSES			RECOVERIES		
	Passes	Violation	Ball Hand.	Interceptions	Tie-Ups	Jump Ball
TEAM						
PLAYER NO.						
TOTALS						

FORM D

LOSSES-OF-BALL AND RECOVERIES (EXCEPT REBOUNDS)

(To be kept by third observer.)

both teams and recoveries other than rebounds (see Form D, page 27). It will be noted that losses are divided into three divisions, namely bad passes, violations, and ball-handling. Occasionally a player will be guilty of losing the ball when it is obviously not the passer's fault: for example, not cutting properly to meet a pass. In this case the offender should be charged with a loss under ball-handling.

Interceptions are credited to a player who gains possession of the ball from the other team in general floor play. If a player throws the ball out-of-bounds a *team* interception is credited to the opponent. The observer may check his accuracy since the number of interceptions should equal the number of losses due to bad passes and poor ball-handling. Jump-ball recoveries are credited to the player retrieving the jump ball. This observer may also keep tie-ups if desired. If assists and points-responsible-for are to be kept, either the second or third observer may keep them by adding the necessary columns to Form C or D.

The procedure in recording losses and recoveries is to mark a tally opposite the player's name in the proper column.

The observers may total the results and have the records available to the coach at half time. After the game they should be recorded on the complete scout report sheet and percentages computed. Everything shown on the front page of the game scout record, Form A, may be derived from Forms B, C, and D and the score book. The transfer to the permanent sheet (Form A) may be done in less than one hour. It is suggested that the coach do this so that he may analyze the performances of the players and team during the game.

The subjective part of the report is a matter of observation *by an expert*, usually the head coach. An assistant coach, or some other qualified observer, may record plays and notes on forms during the game. However, this cannot be done by a casual observer. It is suggested that immediately following the game or during the next day, the coach record his subjec-

tive observations on the back of Form A. If a secretary is available, much of the subjective report may be dictated and typed on the form. If other scouts are available a collaborated report may be given. Completing the objective and subjective report should not take more than two to three hours of a coach's time and the permanent record with its future values will repay his effort.

OTHER SCOUTING METHODS

Individual charts

Many coaches may prefer to secure objective data through the use of individual charts, as illustrated in Form E, Page 30. In this method, the starting player in each position is No. 1. The first substitute in a position is No. 2, the second substitute in No. 3. If a shot is successful the number is encircled. Second-half shots may be underlined to distinguish them from first-half shots. This is the most simple method of charting shots on individual charts. If more detailed information is desired, various symbols may be used. Some coaches desire the following information (in each case special symbols may be used):

1. Bad shots as distinguished from good shots. This requires an expert observer with knowledge of the game.

2. The type of shot taken, whether it be a one-hand shot, a two-hand shot, a hook shot, an under-hand shot, or an overhead shot. If types of shots are recorded, one method is to use numbers for each type of shot. For example, 1—set shot; 2—right-hand shot; 3—left-hand shot; 4—lay-up shot; 5—rebound shot.

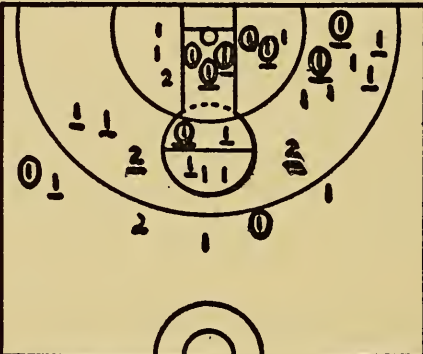
3. Whether the shot was taken as the result of a rebound, a fast break, or a set play.

It is suggested that coaches avoid complicating the charts with a mass of data which will not be of actual value. Most

coaches will find it sufficient merely to chart the shots attempted and the shots made from the proper location.

The other objective data should be recorded by using the same method. No. 1 is used for the starting player, No. 2 for the first substitute, etc. A diagonal line separates the two halves.

SINGLE GAME EXAMPLE
 (• FROM YALE-CORNELL GAME 1947)
 NAME LAVELLI POS. R.F. NO. 8
 SUB GAULT #21 SUB



RECOVERIES

INTERCEPTIONS	JUMP BALL
/ 22	12/

REBOUNDS

OFFENSIVE	DEFENSIVE
2/	2/ 11

LOSS OF BALL

PASSES	VIOLATION	BALL HAND.
1/2		1/1

ASSISTS **PTS. RESPONSIBLE FOR**

11/111	***1/***1 22
--------	-----------------

FREE THROWS **PERSONAL FOULS**

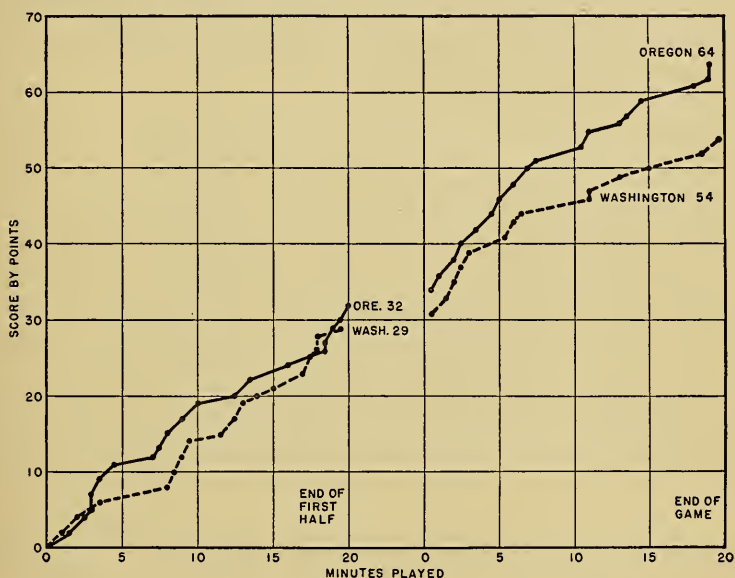
00/100000	1/1
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FORM E

Individual Chart

In the points-responsible-for box an x indicates two points (field goal) and the number 1 indicates one point (free throw). If a second player is playing in the position, use number 2 below the symbol (see example).

One advantage of the individual chart method is that it gives the coach the complete picture of each player's achieve-



FORM F

Graph of a Basketball Game.

ment at a glance. This type of record has often been used along with the team forms. The results may easily be recorded on a permanent scout report like Form A. In other words the individual chart gives the same information as that obtained from Forms B, C, and D.

Graphs

Some coaches prefer the use of graphs in keeping game records. Form F, above, illustrates how a graph may be used

to show the progress of teams during a game. A glance at the graph will indicate when each team scored and the game situation at any minute during the game.

Graphs may also be used for individual and team shooting and scoring records but they are more complicated and less desirable than the plans already described.

The individual-chart method and the graph method refer, of course, to objective scouting. Subjective observations are always the same in procedure.

Chapter 4

Using Scout Reports for the Future

EACH SCOUT REPORT, IF CAREFULLY STUDIED, SHOULD lead to recommendations for the next game, even though it be with another opponent. In any event, the parts of the report that have to do with one's own team may be utilized. Prior to playing the next game, possibly on the Monday following a week-end game, the scout report may be taken up with the squad and plans made for the game to come.

It has been found that reviewing scout reports over a period of years helps in planning to meet a known opponent. A sample of notes taken from scout reports to meet a situation of this kind follows:

Oregon vs. Washington, January 25, 1946 (Notes taken from scout reports of past three seasons).

1. Keep out of corners on fast break with the ball.
2. Trailer man is open around the sides of the court.
3. At least one man play the ball down court; two if possible.
4. With lead make them come out; they prefer to play loose.
5. Drive in on them individually. They will foul. Pass to open man when they take over.
6. They use a long-pass fast break. Two defensive men must be back at all times.
7. Analyze their personnel. Johnson is key man.
8. No. 3 on Smith's side of floor was good last year. See where he plays and run plays at him.
9. Wide attack is good. Screen for side set shots.
10. They slap rebounds back. Guards play to intercept these.
11. Screen out Jones on rebounds. He is key man.

12. Diagram their jump-ball play. It scored for them last year.
13. All five Washington men can score. They must all be guarded tightly.
14. Work to Anderson's side from post. They will play him tight.
15. Watch man who loosens to tie up the post man. His man should cut for basket.
16. Don't throw to Anderson down the side. They watch for this and will intercept.
17. No. 5 man can drive into foul area and down sides.
18. On defense guards must go through on the No. 3 play. They fake to the outside and go to the inside.
19. The out-of-bounds play to the left side going into the basket was good last year.
20. On jump balls tip away from the spot where their forward comes in.
21. Their center jumps in front of the post man. Pass over him.
22. The screen on sides is easy for set shots.
23. Force play early and as much as possible. Tie up their guards.
24. They had three men on the offensive board but do not press down court; they drop back fast. If forwards take their guards to the sides, our guards can drive in.
25. Free-throw arrangement must be reviewed. They use rebound plays.
26. Take over fast on defense. Make them shoot from outside.
27. Drive all the way to the end of the court. They stop their defense half way.
28. They rebound harder offensively when trailing.
29. They break forward to the post.
30. Roll ball into the pivot. On defense they play hard on the sides.
31. Set up plays early in the game. Increase tempo later.
32. Go over the defense for their No. 3 play. Sliding defense will be best.
33. Cross the forwards on the fast break.
34. Guards should rebound offensively early in the game.
35. The left side plays are good. They expect us to work to the right.

ADDITIONAL USES OF SCOUT REPORTS

Another valuable way to use scout reports of your games in the future is to keep permanent records of the performance of

each player and of the team during the season. These records are easily obtainable from the game reports. Forms G and H on pages 36-37 and 40 illustrate how a player's complete record for the season may be kept. In this particular example, the player's record is for conference games only. For example, the first game listed is Yale vs. University of Pennsylvania. It is very simple to examine the scout report for this game and take the individual player's record from it.

On the shooting chart in Form G, the shot attempts and goals scored by each player are given for each game. The numbers used correspond to the game number as indicated in the Game Number column. For example, 1 indicates games with the University of Pennsylvania. If the shot attempt is successful, it is encircled.

The example in Form G divides the shooting chart into games played away from home and games played at home, since this particular information was desired. It also shows results for the first-half shooting compared to the second half. Other plans may be used depending on the coach's or player's needs.

Much information may be gained from studying this report. The over-all picture shows that this player made twelve field goals in sixty-six attempts in the long area for a percentage of .182. He made eleven goals in forty-three attempts in the medium area for a percentage of .256. He made twenty-two goals in fifty-six attempts in the short area for a percentage of .393. His total performance was forty-five field goals in one hundred and sixty-five attempts for a .273 percentage. This player was a much more accurate shooter in the second half. First-half totals show that he made only seventeen field goals in eighty-seven attempts—a .195 shooting percentage. In the second half, however, he made twenty-eight field goals in seventy-eight attempts—a .359 percentage. This indicates that the player is in good condition and a good second-half competitor. However, the first-half record is so low that it must be brought up to par. Per-

haps a longer warm-up period is necessary for him or he may be unusually nervous before a game. The report also shows that this player was a more accurate shooter away from than at home. He made twenty-five field goals in eighty-four attempts (a .298 percentage) away from home as compared to twenty field goals in eighty-one attempts (a .247 percentage)

TEAM		HALF SCORE () FINAL SCORE ()																												
DATE		PLACE	REFEREE																											
(Home Games)		FIRST HALF	(Games Away)																											
RUNNING SCORE HOME TEAM () Time Out.																														
Running Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
Player Scoring																														
Time of Score																														
Running Score	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	
Player Scoring																														
Time of Score																														
Running Score	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	
Player Scoring																														
Time of Score																														

Redden, Thomas		NO	TIME PLAYED	SUMMARY OF SHOTS										PCT		FREE THROWS	
Yale Opponents 1947-48				LONG		MEDIUM		SHORT		TOTALS							
				S	B	S	B	S	B	S	B						
* Pennsylvania	1	35	11	4	6	0	6	4	23	8	348	4	2				
* Columbia	2	40	6	2	4	1	4	0	14	3	214	4	4				
* Cornell	3	36	7	1	1	0	3	1	11	2	182	4	4				
* Princeton	4	37½	6	1	1	0	7	2	14	3	214	10	7				
* Dartmouth	5	25	4	0	1	0	3	0	8	0	000	0	0				
* Harvard	6	35	4	1	3	1	4	2	11	4	364	0	0				
* Pennsylvania	1	38	4	0	5	2	1	1	10	3	300	5	3				
* Columbia	2	35	4	0	2	0	6	1	12	1	083	1	0				
* Cornell	3	40	2	0	5	1	4	3	11	4	364	2	1				
* Princeton	4	40	5	1	6	2	8	2	19	5	263	2	1				
* Dartmouth	5	36	3	0	4	1	6	3	13	4	308	3	3				
* Harvard	6	35	10	2	5	3	4	3	19	8	421	4	3				
TEAM TOTALS			434½	66	12	43	11	56	22	165	45	273	39	28			
* Home Games			Pct. →	(182)	(256)	(393)					(718)						

FORM G

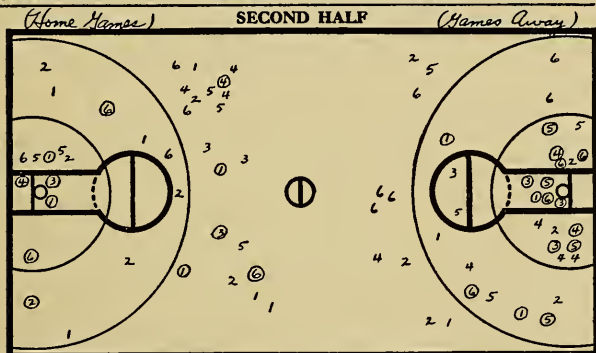
Player's Season Record

(Form 1)

at home. This is rather unusual but it again indicates that the player is a good competitor and is not bothered by unfamiliar surroundings. Poor home-court lighting may have been a factor.

The report also shows free-throw results. This same man

vs. TEAM HALF SCORE () FINAL SCORE ()
 UMPIRE TIMER SCORER



RUNNING SCORE OPPONENTS () Time Out.....

Running Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Player Scoring																													
Time of Score																													

Running Score	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58
Player Scoring																													
Time of Score																													

Running Score	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87
Player Scoring																													
Time of Score																													

LOSS OF BALL			RECOVERIES						ASSISTS	PERSONAL FOULS	POINTS RESPON- SIBLE FOR	TOTAL POINTS
PASSES	VIOLATION	BALL HAND	INTER CEPTIONS	TIE UPS	HELLO BALL	BACKBOARD OFFENSE		DEFENSE				
1	1	0	1	1	1	4	1		1		18	
1	1	2	2	2	2	0	3		1		10	
2	3	1	5	3	2	1	3		3		8	
1	5	1	2	2	2	3	4		4		13	
0	1	0	1	2	0	3	3		3		0	
2	0	1	4	2	1	1	3		4		8	
1	1	1	2	1	1	3	3		4		9	
2	3	2	7	2	1	2	3		1		2	
0	2	1	1	0	0	2	2		3		9	
1	1	1	2	1	2	1	3		4		11	
3	1	2	2	0	1	3	4		5		11	
0	5	1	4	1	3	3	5		3		19	
14	24	13	33	17	16	26	37		36		118	

FORM G

Player's Season Record
 (cont'd.)

THOMAS REDDEN—1947-48—OFF-SEASON SUGGESTIONS
1947-48 SHOOTING DATA (12 CONFERENCE GAMES)

	Long Shots	Me- dium Shots	Short Shots	Total Shots	Free Throws	Total Points
	66-12	43-11	56-22	165-45	39-28	118
Percentage	.182	.256	.393	.273	.718	
*Av. Per Game	6-1	4-1	5-2	15-4	4-3	11
	At Home Shooting	Away Shooting	1st Half Shooting	2nd Half Shooting		
	81-20	84-25	87-17	78-28		
Percentage	.247	.298	.195	.359		

* Based on time played: 434½ min. (approximately equal to 11 40-min. games).

Your record also shows 51 losses-of-ball (nearly five per game); 63 rebounds (6 per game); 66 other recoveries (6 per game) and 36 fouls (3 per game).

You can be considered a good college basketball player. You have aggressiveness, determination and are a good competitor. However, you still have some rough spots in your game that could be improved. If you will work hard during the off-season you will have a much better season next year. Work on the following fundamentals:

Footwork:

You are too stiff in your actions and this is one reason you lose the ball as much as you do. Practice stops, starts and pivots that we have covered. Defensively, you also need to improve on footwork, get down lower, and learn to move backward faster. But, your defense this year was probably better than that of most of the other players.

Dribbling, Passing and Ball-Handling:

Your dribble is too high (another reason for your frequent loss of the ball this year). You need to get down over the ball, be able to dribble fast with either hand and also develop a change of pace in your dribble. You also need to practice quick ball-handling and passing which will be used a great deal more with a moving offense next year.

Shooting:

This should demand a major part of your off-season practice time. Your short shooting was not up to a winning average. You need to practice driving in hard and shooting with either hand and high jumping rather than broad jumping. You also need much practice shooting about eight feet out from the basket. In the middle area, work hard on the right-hand shot. You can also use the set shot in this area. Practice both of these a great deal. You do not hit a high average in these shots.

Individual Defense:

Get an opponent whenever possible and keep practicing your individual defense. Do the same thing on rebounds. You could do better defensive rebounding and practicing this will make you more conscious of it. Each time you go on the court, end your practice with running for conditioning. Finish with some good sprints and also some backward sprints. This will build up your endurance for the coming season. Please keep in touch with me during the summer.

made twenty-eight free-throw goals in thirty-nine attempts, a .718 percentage. It also shows all of the other objective findings such as rebounds and losses-of-ball. Since the total number of minutes played are given, it is possible to determine how many forty minute periods each player plays and arrive at the average number of attempts, goals, rebounds, and losses per game, if desired.

A typical example of suggestions to the player that may be recorded on the back of Form G is given on pp. 38-39. These, of course, are based on the season record and any sub-

jective observations noted during the season. *A copy of this report should be given to the player so that he can improve his game accordingly.* Similar records are possible for players on opposing teams if enough data are available.

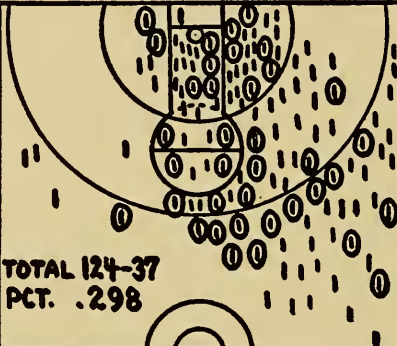
Form H, below, shows how an individual-chart form

SEASON SUMMARY EXAMPLE

NAME **PEACOCK** POS. **LG** NO. **7**

SUB

SUB

				
TOTAL 124-37 PCT. .298				
RECOVERIES				
INTERCEPTIONS	JUMP BALL			
31	17			
REBOUNDS				
OFFENSIVE	DEFENSIVE			
37	44			
LOSS OF BALL				
PASSES	VIOLATION	BALL HAND.		
16	9	21		
ASSISTS	PTS. RESPONSIBLE FOR			
	<table border="1"> <tr> <td>31</td> <td>71</td> </tr> </table>		31	71
31	71			
FREE THROWS		PERSONAL FOULS		
33-24 (.727)		43		

FORM H

Player's Season Record.

(Form 2)

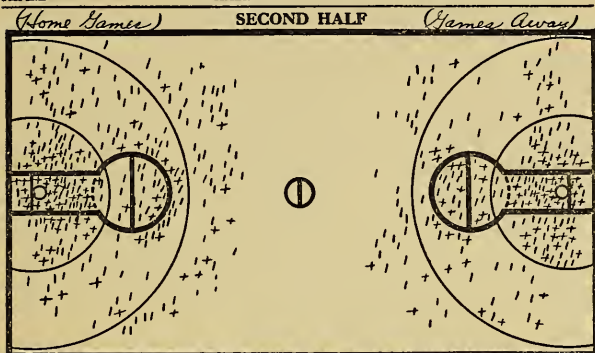
may be used for a player's season record. Again, the results are taken from the game report. This report is not broken down into first and second halves or games at home and away from home. Neither is it broken down for the different games. It merely shows field-goal attempts by a vertical line and the line is encircled if the goal was made. Notice that this particular player did most of his shooting from the center or right side of the court.

The team's record for a complete season may be kept in the same manner. Form I on page 42 gives an example. Again, this record is for conference games only. Since each individual game report shows the field-goal attempts and goals on the game charts, it is not necessary to duplicate this on the season record charts. The recordings on the season charts merely indicate by a vertical line the spot from which a field-goal attempt is taken. If the line is crossed, it indicates that the attempt was successful. This record, at a glance, gives the shooting percentages of the team from all areas; the free-throw percentage; and the other objective information. Percentages and averages per game may be worked out.

In a similar manner, the same information may be recorded about the opposing team during the season. This is very important if your team's achievements are to be compared with those of the opponents'.

It is interesting to note that in this season report, the team had a shooting average of .249 at home and .295 away from home. Perhaps it was partly psychological, but the players complained that the lighting on the home court was very poor. Using these records as a selling point, an improvement was made before the next season. The shooting average of the team in 1948-49 improved from .270 to .319 and the home shooting average improved accordingly. This indicates that these reports have many uses besides being coaching aids. Whether it was due to improved lighting or psychological factors, shooting did improve.

TEAM _____ HALF SCORE () FINAL SCORE ()
 UMPIRE _____ TIMER _____ SCORER _____



RUNNING SCORE OPPONENTS () Time Out

Running Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Player Scoring																													
Time of Score																													

Running Score	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58
Player Scoring																													
Time of Score																													

Running Score	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87
Player Scoring																													
Time of Score																													

LOSS OF BALL			RECOVERIES					ASSISTS	PERSONAL FOULS	POINTS RESPON SIBLE FOR	TOTAL POINTS
PASSES	VIOLATION	BALL HAND	INTER CEPTIONS	TIE UPS	HELLO BALL	BACKBOARD OFFENSE/DEFENSE					
9	1	5	16	10	6	34	45		18	42	63
3	1	8	12	10	9	19	28		7	56	44
7	6	4	16	13	4	26	20		21	58	54
8	8	5	19	8	7	31	26		21	53	65
9	7	6	10	6	7	45	40		16	68	63
10	2	8	18	9	7	32	37		19	53	64
6	5	5	11	5	5	28	32		21	59	56
10	6	6	13	8	4	15	18		12	61	54
10	8	4	10	6	5	31	34		29	52	46
9	8	6	12	7	6	34	42		17	53	52
4	7	8	7	6	6	23	36		24	76	68
6	16	8	23	2	6	18	48		26	51	80
91	75	73	167	90	72	336	406		231	682	709

FORM I

Team's Season Record
 (cont'd.)

the coming season in the light of the past season's experiences.

The following is an example of information that may be included for future reference on the back of Form I.

SEASON SUMMARY—YALE—1947-48

Suggestions for Next Year

At Home Shooting	Away Shooting	1st Half Shooting	2nd Half Shooting
515-128 .249	431-127 .295	460-116 .252	486-139 .286

(For Other Shooting Records, see Form H)

AVERAGES PER GAME

	Shots	Goals	
Long Shots	19	4+	Loss-of-Ball..... 20
Medium Shots	28	6+	Rebounds..... 62
Short Shots	32—	11—	Other Recoveries.... 27
Total Shots	79	21	Personal Fouls..... 19
Free Throws	24	17	Total Points..... 59
			Opponents Points... 57

Shooting was up to par only in the long area. The record in the medium area should be much higher and the short area at .333 was extremely low. We also had fewer short shots at the basket than our opponents. Lack of adequate shooting practice early in the season must be corrected next year. The fact that we were a better shooting team away from home bears out the point that lighting on the home court is very poor. It must be improved next season.

Each player must have individual instruction in shooting and this must be emphasized in off-season practice.

Next to shooting, our biggest weakness was poor rebounding. Although we retrieved an average of sixty-two rebounds a game, we were weak in this department against the top teams. Individual work and team rebound organization must be improved next year.

Defensively, every player on the squad should improve. The opponents averaged fifty-seven points a game which is far too many. We must pay more attention to individual defense in early season practice.

The fact that we committed nineteen personal fouls a game in-

icates that our footwork and general individual defense is below par.

Losses-of-ball totaled two hundred and thirty-nine for twelve games, an average of twenty per game. This gives the other team twenty points every ball game. Much of this was due to learning a new, fast system but it must be cut down materially next year.

Generally speaking, the squad was very cooperative and had a very good attitude. The fact that the squad was learning a new system and got a late start contributed very much to a mediocre season.

In addition to emphasizing fundamentals and team play, we must stress better physical condition next year. We were not a strong second-half team during the past season. We should also make more effort to have the entire squad available daily for practice.

Chapter 5

Basketball Shooting and Its Implications

THE ONLY WAY TO SCORE IN A BASKETBALL GAME IS TO "shoot a basket." See photo, Shooting a Basket, in illustrated section. And, as the rule book states: "The purpose of a basketball team is to throw the ball into its own basket and to prevent the other team from securing the ball and scoring."¹ Therefore to "shoot a basket" becomes the main objective. Various fundamentals, techniques, systems, and styles of play are all directed to this end. The fact that all players can shoot at the basket is a chief reason for wide participation in the game. Shooting is obviously the most important factor in the game. In view of this fact, it is surprising that so little attention has been paid to shooting percentages and to an analysis of the areas from which shots are taken.

Shooting averages in basketball are just as important as batting averages in baseball. We should have some standard by which to measure the shooting ability of a player. If a good baseball batting average is .300, what is a good basketball shooting average? How much shooting ability should be expected from a basketball player? Since shots are taken from various parts of the court, we must also know what shooting performance to expect at various distances from the basket.

By compiling the results of 460 college basketball games it was possible to arrive at certain results. The games included

¹ Technically, a team's "own basket" is the one *at which* they are shooting.

a thirteen-year period starting with the 1936-37 season through the 1948-49 season. There are many intersectional games in the survey including fifty-one games played in Madison Square Garden during the 1944-45 season. Tabulations of field-goal attempts and field goals have been made in various areas. Free-throw attempts and free-throw goals were also recorded.

Comparisons are made between major and minor games, first- and second-half performances, winning and losing teams, home and visiting teams. Intra-squad scrimmages and practice shots are also used for comparison purposes. The results of this survey are given in this chapter.

BASKETBALL SCORING

There is a definite trend toward higher scoring in basketball. Part of this is due to rule changes that have lengthened the actual playing time. The elimination of the center jump and the trend toward a faster game have also increased scoring. Table I, All Games Scoring, page 48 proves these statements. During the thirteen-year period, the average score per game has increased from 70.5 for both teams to 126.2.

However, the 126.2 mark is admittedly above the national average since it includes Yale games and Yale in 1948-49 had close to a 70-point game average. The N.C.A.A. bureau in 1949 reports that college scoring in 3603 major college games averaged 109.5 points per game for both teams. This is a 3.0 increase over 1948 when the N.C.A.A. report for 3848 major college games showed a game average of 106.5 for both teams.

The 1948-49 season indicates that teams are scoring an average of around 55 points per game. It should be further noted that the greatest increase in scoring started during the period of World War II. At first it was thought that this was a temporary situation due to the fact that teams were below par defensively and many of the top coaches were in the service.

There was a tendency to de-emphasize proper defensive play and it was thought that a leveling-off would follow. Since scoring is still on the increase, however, it is possible that the peak has not yet been reached. In any event, it is apparent

TABLE I
ALL GAMES SCORING

Season	Number of Games	Score	Average Score per Game
1936-37	31	2185	70.5
1937-38	36	2985	82.9
1938-39	41	3326	81.1
1939-40	32	2748	85.9
1940-41	43	3537	82.3
1941-42	32	2588	80.9
1942-43	35	2985	85.3
1943-44	32	2763	86.3
1944-45	52	5306	102.
1945-46	37	3855	104.2
1946-47	32	3537	110.5
1947-48	27	3174	117.6
1948-49	30	3787	126.2
Game Totals (both teams)	460	42776	93.0
Major Games (both teams)	382	35715	93.5
Minor Games (both teams)	78	7061	90.5
Winning Team	460	24253	52.7
Losing Team	460	18523	40.3
Home Team	448	21614	48.2
Visiting Team	472	21162	44.9

This table shows total scores and average scores per game for both teams, by seasons, for 460 games. Similar information is given for major and minor games, winning and losing teams, and home and visiting teams.

that basketball is such a high-scoring affair that special attention must be given to shooting and shooting percentages.

BASKETBALL SHOOTING PERCENTAGES

The basketball shooting results for the 460 games are found in the total shot table, Table II, pp. 49-50. The trend is toward more accuracy but even greater improvement is anticipated.

Through the cooperation of Mr. Ned Irish, shooting records were kept of all games played in Madison Square Garden during the 1944-45 season. In mid-season of 1944-45, the results of the New York games up to that date, along with the results of the college survey since 1936-37, were given to the New York sportswriters and coaches. For possibly the first

TABLE II
TOTAL SHOTS

Season	Number of Games	Field-Goal Attempts	Field Goals	Percentage	Average Field-Goal Attempts per Game	Average Field Goals per Game
1936-37	31	3082	790	.256	99	25
1937-38	36	4198	1090	.260	117	30
1938-39	41	4956	1249	.252	121	30
1939-40	32	4101	1115	.272	128	35
1940-41	43	5188	1411	.272	121	33
1941-42	32	3790	996	.263	118	31
1942-43	35	4294	1168	.272	123	33
1943-44	32	4004	1112	.278	125	35
1944-45	52	8319	2154	.259	160	41
1945-46	37	5238	1491	.285	142	40
1946-47	32	4715	1361	.289	147	43
1947-48	27	4201	1204	.287	156	46
1948-49	30	5081	1460	.287	170	49

TABLE II (Continued)

Season	Number of Games	Field- Goal At- tempts	Field Goals	Per- centage	Average Field- Goal At- tempts per Game	Average Field Goals per Game
Game Totals (both teams)	460	61167	16601	.271	133	36.1
Major Games (both teams)	382	50995	13762	.270	133.5	36.0
Minor Games (both teams)	78	10172	2839	.280	130.4	36.4
1st Half	460	30129	7977	.265	65.5	17.3
2nd Half	460	31038	8624	.278	67.5	18.8
Winning Team	460	31209	9554	.306	67.8	20.8
Losing Team	460	29958	7047	.235	65.1	15.3
Home Team	448	30002	8398	.280	67.0	18.7
Visiting Team	472	31165	8203	.263	66.0	17.4
Intra-Squad Scrimmages (both teams)	75	10520	3457	.329	140.3	46.1
Practice Shots		14925	8474	.568		

This table shows field-goal attempts and field goals by both teams, by seasons, for the 460 games; percentages of attempts scored and average number of attempts and goals per game. It gives similar information for major and minor games, first and second halves, winning and losing teams, and home and visiting teams; also, a sampling from intra-squad scrimmages, and practice shots without defense.

time, national publicity was given to basketball shooting percentages. Of course, many coaches had kept shooting charts and records prior to this, but very few had made the results public. Since 1945, there has been a great trend toward keeping player and team shooting records and percentages. In 1947 the National Collegiate Athletic Association started to

compile reports from records of the minor and major college games.

As a result of attention to this phase of the game, it will be noted (Table II, Total Shots, on pp. 49-50) that shooting percentages have increased during the last few years. However, the percentages are probably far below the standards that might be achieved. While the percentage of teams in the last two years has been .287, the over-all average for college basketball is .271. The N.C.A.A. average during the 1948-49 season was .308. In 1948, it was .293. However, it must be realized that many teams did not report to the N.C.A.A. and probably those with higher percentages are more inclined to make reports. Also in the national picture there is lack of uniformity and standardization as to what constitutes an attempt. Some teams count tip-ups and some count blocked shots, while others do not. Hence, many teams do not report all attempts that would cause a considerably higher percentage. It is reasonable to state that the accepted shooting percentage for the average college basketball team is between .270 and .280.

It is certain that if coaches and players pay more attention to shooting percentages, they will be able to improve shooting efficiency. The Yale basketball team in 1947-48 had a .270 shooting average. During the 1948-49 season, this improved to .319. It is noteworthy that the team had many of the same players during both years. Each player increased his percentage over the previous year by concentrated shooting practice and by keeping a careful record of results. If increased shooting efficiency was not the reason for the difference between a championship in 1948-49 and a mediocre season in 1947-48, it was at least a very important factor in this difference.

Further study of Table II will show that the average number of attempts per game have increased greatly since 1945. Various comparisons are given in the table. Of particular

note is the fact that winning teams hit an average of .306 while losing teams drop to .235. A complete study of Table II should give some idea of what can be expected from individuals and teams in various game situations.

THE SHORT SHOT

(See photo, The Short Shot, in illustrated section.)

A "short shot" is a shot taken within a radius of twelve feet from the basket. The twelve-foot radius is stipulated because this is the accepted area for the lay-up or cripple shot. These are predominantly shots taken with one hand and, in most cases, are backboard shots. It is, of course, a shot that players and teams try to use most frequently because the accuracy is and should be higher in this area. Still, there are surprising results that would indicate that accuracy under game conditions is much lower than it should be. The percentage for all games is .372 and it has not improved in recent years. For complete results on the short shot see Table III, Short Area Shooting, page 53.

The averages in this area should be much higher. A tighter defense is partly responsible for this fact but it is also due to taking poor shots at the basket. Players who get in as close as this are inclined to take a shot at the basket, whether they are in a position for a good shot or not. This is particularly true after retrieving rebounds. Practice results, where there is no defense, indicate that players make an average of .867 in this area. The coach who insists that only *fundamentally sound* shots be taken at the basket will be well repaid. It might even be reasonable to improve the shooting average for the short shot to .500. It is also suggested that players first ground themselves properly in the fundamentals of the short shot and follow this with constant practice. A player that will drive toward the basket at full speed and shoot each time until ten successive goals have been made will be surprised at the improvement made. The area eight or ten feet from beneath the basket should receive special attention from all

TABLE III
SHORT-AREA SHOOTING*

Season	Num- ber of Games	Field- Goal At- tempts	Field Goals	Per- centage	Average Field- Goal At- tempts per Game	Average Field Goals per Game
1936-37	31	1021	367	.359	33	12.
1937-38	36	1394	511	.367	39	14.
1938-39	41	1381	517	.374	34	13.
1939-40	32	1112	436	.392	35	14.
1940-41	43	1468	611	.416	34	14.
1941-42	32	1065	413	.388	33	13.
1942-43	35	1449	572	.395	41	16.
1943-44	32	1377	560	.407	43	18.
1944-45	52	3765	1275	.339	72	25.
1945-46	37	1968	735	.373	53	20.
1946-47	32	2138	796	.372	67	25.
1947-48	27	1906	675	.354	71	25.
1948-49	30	2096	770	.367	70	26.
Game Totals (both teams)	460	22140	8238	.372	48.1	17.9
Major Game Total (both teams)	382	18435	6768	.367	48.3	17.7
Minor Game Total (both teams)	78	3705	1470	.397	47.5	18.8
Winning Team Total	460	12494	5043	.404	27.2	11.0
Losing Team Total	460	9646	3195	.331	21.0	6.9
Intra-Squad Scrimmages (both teams)	75	4501	1964	.436	60.0	26.2
Practice Shots		3810	3304	.867		

This table shows total shots with percentages and averages as in Table II but for short shots only.

* Short shots are those taken within a radius of twelve feet from the basket.

players since many players neglect to practice shooting in this area.

THE MEDIUM SHOT

(See photo, The Medium Shot, in illustrated section.)

A "medium shot" is a shot taken between a radius of twelve feet and a radius of twenty-four feet from the basket. This particular area was selected for the medium-distance shot because it is considered the half-way mark for shooting from the floor. Very few shots are attempted beyond the thirty-six foot mark. Therefore, the medium shot is midway between the short- and long-shot areas. Probably the most helpful information is found when examining statistics on this "abused" area in basketball. Table IV, page 55 gives complete facts about this area.

Players seem to take a great variety of shots from this area. The two-hand set shot from the chest is used a great deal in the East. In other sections the one-hand set shot is favored. And, where one-hand shooting predominates, there is much shooting on-the-run. Pivot shots and hook shots are also taken frequently from the medium or middle area. Players from Arkansas, West Virginia, and a few other sections, use an overhead shot from this area either from a standing position or using a jump.

Most coaches have become rather lenient in their views on shooting in recent years, as is indicated by the increase in total shots attempted by the average team during a game. As a result, players shoot very freely from this area and take poor shots in many cases. As was suggested in discussing the short-shot area, shots should be taken that are earned. Coaches should observe closely the type of shot taken from this medium area and eliminate the poor-risk shots. This does not mean that all players must use the same type of shot, but they must have one that they can make, one on which they can depend. The following story will illustrate this point.

Tony Lavelli is probably the greatest hook shot the game has

TABLE IV
MEDIUM-AREA SHOOTING*

Seasons	Number of Games	Field- Goal At- tempts	Field Goals	Per- centage	Average Field- Goal At- tempts per Game	Average Field Goals per Game
1936-37	31	1349	288	.213	44	9.
1937-38	36	1859	396	.213	52	11.
1938-39	41	2347	513	.219	57	13.
1939-40	32	1830	449	.245	57	14.
1940-41	43	2358	548	.232	55	13.
1941-42	32	1555	363	.233	49	11.
1942-43	35	1916	402	.210	55	11.
1943-44	32	2013	423	.210	63	13.
1944-45	52	2906	598	.206	56	12.
1945-46	37	2276	525	.231	62	14.
1946-47	32	1875	428	.228	59	13.
1947-48	27	1356	308	.227	50	11.
1948-49	30	2032	461	.227	68	15.
Game Totals (both teams)	460	25672	5702	.222	55.8	12.4
Major Games (both teams)	382	21247	4730	.223	55.6	12.3
Minor Games (both teams)	78	4425	972	.220	56.7	12.4
Winning Team (total)	460	12644	3169	.251	27.5	6.9
Losing Team (total)	460	13028	2533	.194	28.3	5.5
Intra-Squad Scrimmages (both teams)	75	4848	1261	.260	64.6	16.8
Practice Shots		3085	1632	.529		

This table shows total shots with percentages and averages as in Tables II and III but for medium shots only.

* Medium shots are those taken between a radius of twelve feet and a radius of twenty-four feet from the basket.

ever seen. See photo in illustrated section. In the first practice session with Tony, I was rather disappointed to learn that the hook shot was the one that he depended on in the medium area. Most coaches do not consider the hook shot an orthodox shot and it is not a dependable one for most players. Tony was asked to shoot twenty of these highly specialized shots from a distance of approximately fifteen feet. He obliged and made eighteen out of the twenty. He moved out a little farther and nearly duplicated the performance. The next request was for Tony to try the shot with his left hand. He then took twenty hook shots at a distance of fifteen feet and made sixteen. Always the gentleman, Tony asked, "What suggestions do you have? Do you think I should change the shot?" The coach's reply was, "My boy, if you can drop-kick the ball through the basket and make that percentage, it's all right with me."

This great player did not master the hook shot by accident. It was only mastered after many hours of daily practice through the years. Of course, any shot must be fundamentally sound if it is to be consistently accurate. Tony has a perfect follow-through with his hook shot and perfect wrist and finger action. Yet, even this phenomenal shooter improved his shooting percentage nearly twenty points in his last college year through a prescribed practice-shooting program.

There is no reason for the shooting average to drop from .372 in the short area to .222 in this medium area. Practice shooting with no defense in this area shows that players make an average of .526. Why then should it drop so markedly in games? Certainly the fatigue and mental factors could not make this difference. One reason for poor shooting averages from this area, and from all areas, is the fact that most players do not have their attempts and shots recorded, so that they are not conscious of the fact that their averages are low. Naturally, in these cases there is not the incentive to improve. By insistence on good shot attempts from this area, there is reason to believe that the shooting average might be increased

to as high as .300 in major competition. A team should strive to succeed in one-third of its attempts in this area.

Either the one-hand or two-hand shot may be accurate in this area. If the shot is sound, one is as good as the other. Purely from observation, however, it seems that the one-hand shot causes most of the abuses. Players who are in motion are more inclined to take poor shots while going away from the basket. It is suggested that teachers of the one-hand shot pay particular attention to the elimination of poor shots.

THE LONG SHOT

(See photo, The Two-Hand Shot, in illustrated section.)

A "long shot" is a shot taken outside a radius of twenty-four feet from the basket. The distance for the long shot was set at twenty-four feet when the court was divided into three scoring areas, since there are few shots taken beyond the thirty-six foot mark. Hence, each area has a twelve-foot length.

Here the two-hand set shot taken from the chest predominates. The one-hand set shot is also used in the inner part of this long shooting area. Table V, Long-Area Shooting, page 58 gives complete findings. The shooting average in this area could not be expected to compare favorably with the shooting in the short area. However, poor shooting in this area has had many detrimental effects on the game in recent years. This is mainly because the one-hand shot has come into use in many sections of the country to the extent that the two-hand set shot is actually not used at all. From a coaching standpoint, this has encouraged the use of the zone defense and types of defense that call for playing loose away from the ball and congesting the keyhole area.

Suppose that a team is ten points ahead in the middle of a game. The other team cannot shoot long shots well. Why then would not the leading team play a keyhole defense whether it is zone, switching, loose away from the ball,

TABLE V
LONG-AREA SHOOTING*

Season	Number of Games	Field-Goal Attempts	Field Goals	Percentage	Average Field-Goal Attempts per Game	Average Field Goals per Game
1936-37	31	712	135	.190	23	4
1937-38	36	945	183	.194	26	5
1938-39	41	1228	219	.178	30	5
1939-40	32	1159	230	.198	36	7
1940-41	43	1362	252	.185	32	6
1941-42	32	1170	220	.188	37	7
1942-43	35	929	194	.209	27	6
1943-44	32	614	129	.210	19	4
1944-45	52	1648	281	.171	32	5
1945-46	37	994	231	.232	27	6
1946-47	32	702	137	.195	22	4
1947-48	27	939	221	.235	35	8
1948-49	30	953	229	.240	32	8
Game Totals (both teams)	460	13355	2661	.199	29.0	5.8
Major Game Total (both teams)	382	11313	2264	.200	29.6	5.9
Minor Game Total (both teams)	78	2042	397	.194	26.2	5.1
Winning Team	460	6071	1342	.221	13.2	2.9
Losing Team	460	7284	1319	.181	15.8	2.9
Intra-Squad Scrimmages (both teams)	75	1171	232	.198	15.6	3.1
Practice Shots		2905	1046	.360		

* Long shots are those taken beyond a radius of twenty-four feet from the basket.

or some similar defense? What chance does a trailing team have to work the ball in if they cannot draw the defense out with at least an occasional long shot? Unless the trailing team can score on a fast break or has an unusually strong rebounding team, they do not have a chance. This type of game is not only unsatisfactory from a coaching standpoint, but it also ruins spectator interest. The answer is to teach boys a good set shot that they can use out to the forty-foot mark. It is one of the oldest stratagems of the game that a player shoots long to draw his opponent to him so that he can drive in to the basket. This is becoming somewhat rare in basketball.

Because of these facts, coaches are strongly urged to teach the long shot, starting with the *beginner* in basketball. No shot has more player and spectator appeal, or is more helpful to the entire offensive plan in any style of play.

College coaches in many sections are faced with the problem of players who report to them never having learned a two-hand set shot. At Yale, for example, boys come from all sections of the country. At least 70 percent of those who report have never used a two-hand set shot for their long shots and most of them cannot shoot accurately from the long area at all. Although it is possible, it is still difficult to teach a player of college age to learn new shots. Players should learn the technique of the two-hand set shot while in Junior High School or even earlier. The shot should be mastered first in areas close to the basket. By the time a player is in college, he should be able to hit the two-hand set shot from as far as thirty-five or forty feet.

The long two-hand set shot is a "must" in professional basketball, and many excellent prospects have failed in the professional ranks because they have failed to master it.

Table V (left) shows total shots with percentages and averages as in Tables II, III and IV but for long shots only.

TABLE VI
STYLES OF FIELD-GOAL SHOOTING
(both teams)

The Long Shot

	No. of Games	<i>One-Hand</i> At-tempts Bas-kets		Per-centage	<i>Two-Hand</i> At-tempts Bas-kets		Per-centage
1st Half	77	343	52	.152	982	170	.173
2nd Half	77	344	76	.221	911	166	.182
Total		687	128	.186	1893	336	.177

The Medium Shot

	No. of Games	<i>One-Hand</i> At-tempts Bas-kets		Per-centage	<i>Two-Hand</i> At-tempts Bas-kets		Per-centage
1st Half	77	1644	362	.220	426	95	.223
2nd Half	77	1669	342	.205	394	83	.211
Total		3313	704	.212	820	178	.217

The Short Shot

	No. of Games	<i>One-Hand</i> At-tempts Bas-kets		Per-centage	<i>Two-Hand</i> At-tempts Bas-kets		Per-centage
1st Half	77	2132	734	.344	88	27	.307
2nd Half	77	2321	813	.350	90	25	.278
Total		4453	1547	.347	178	52	.292

TABLE VI (Continued)

Total Shots

	No. of Games	Attempts	Baskets	Percentage
1st Half	77	5615	1440	.256
2nd Half	77	5729	1505	.263
Total		11344	2945	.260

This table shows a comparison of one-hand and two-hand shooting in seventy-seven games. Number of attempts, goals scored, percentage of attempts scored and totals, in long, medium and short areas and in first and second halves, are given; also totals for both types of shots, with percentages, in first and second halves. The report is for both teams.

STYLES OF FIELD-GOAL SHOOTING

This book does not include a complete study of skills or techniques. However, the one-hand and two-hand shots have caused so much controversy that a sampling of games was used to study them. Table VI, Styles of Field-Goal Shooting, pp. 60-61 gives the results in seventy-seven major games.

The two-hand set shot is considered best for use in the long-shot area. While the results indicate that the one-hand shot is a bit more accurate from a long distance (the average is .186 as compared to .177 for the two-hand shot), it should be pointed out that most of the one-hand shooting was done just outside the twenty-four foot mark. The accuracy of this type of shot dropped considerably from a greater distance. The study included fifty-one games in Madison Square Garden (mostly intersectional games), one other New York game, and twenty-five games from western areas where the one-hand shooting is used to a greater extent. It is significant that

the one-hand shot average in the long area was only .135 in the Garden games, while it was .203 for the other games. Another significant fact is that less than five one-hand attempts were made by both teams per game, so that possibly not enough shooting was attempted to form any definite conclusion.

In the medium area it will be noted that there was very little difference between the accuracy of the one-hand and two-hand shot. However, the one-hand shot was used more than four times as much as the two-hand shot. This was true of both eastern and western teams.

The short shot is almost entirely a one-hand shot in all sections.

Conclusions are that the one-hand shot is as good, or better, in the first two areas; the two-hand set shot is still recommended in the long area.

THE FREE THROW

Championships are won at the free-throw line. Of 460 games, more than one hundred were won by less than four points. In each of these games a perfect free-throw record by the losing team would have made it the winner. Basketball coaches know that they lose enough games at the free-throw lines each year to make the difference in winning and losing a championship race. In spite of this knowledge, comparatively little has been done to improve free-throw percentages. Many studies are available on free-throw results and the accepted average for college teams is slightly less than .600. There are certain results of this study that may be helpful in improving this percentage. Table VII, pp. 64-65 gives the complete results.

In the entire 460 games a total of 16,181 free throws were attempted by all teams and 9,574 were converted. This is an average of .592. The records of free-throw attempts and free-throw goals are reported accurately to the National Col-

legiate Athletic Association bureau and the results released by this bureau closely parallel the results of the author's survey. In 3,848 major college games in 1948, the free-throw percentage was .598. The 1949 report for 3,603 major college games showed a percentage of .616. Allowing again for the fact that teams with extremely poor records probably do not report faithfully to the national bureau, the percentages released are probably a bit high.

Accuracy in free-throw shots has improved in recent years. This has been due partly to improvement in equipment and facilities (better balls and baskets, and improved lighting conditions) and partly to instruction and practice. Yet the average in 1949 remained at approximately .600, and this is extremely low.

It should be kept in mind that the free throw is one type of shot that is exactly the same under game conditions as in practice, as far as the actual physical performance is concerned. No one is guarding the shooter as when a player attempts a field goal. A record of 5,275 shots by our squad in practice shows a success percentage of .780. What then makes the difference during a game?

A study of 200 games indicates that, in the first half, the free-throw percentage was .597, while in the second half it dropped to .584. This difference indicates that the element of fatigue may enter into the situation. It is therefore suggested that after the technique of the free throw is mastered, players practice free throws during and following strenuous practice sessions. Of course, proper physical condition that will carry a player through an entire game is an even better answer. Research also indicates that the winning team made a percentage of .609 while the losing team made an average of .573. This may indicate that the winning team was more skillful in free-throw shooting but it also indicates a probable decrease in the fatigue factor. There was no great difference noted in the free-throw performance at home and on visit-

ing courts; the percentage for home games was .590 and for games away from home was .593.

Another factor that affects the player in free-throw shots and probably reduces his efficiency even more than fatigue is his mental state. Players who are affected by spectators, the importance of the game or of the situation in the game, and who allow themselves to think of other things except making the free throws, are no doubt the rule rather than the exception.

A typical example of this occurred a number of years ago in a game between Oregon and Washington State College. As the gun sounded ending the game, a foul was called that

TABLE VII
FREE THROWS

Season	No. of Games	Free-Throw At-tempts	Free-Throw Goals	Per-centage	Average Free-Throw At-tempts per Game	Average Free-Throw Goals per Game
1936-37	31	1043	605	.580	34	20
1937-38	36	1356	805	.594	38	22
1938-39	41	1406	828	.589	34	20
1939-40	32	857	518	.604	27	16
1940-41	43	1154	715	.620	27	17
1941-42	32	1013	596	.588	32	19
1942-43	35	1100	649	.590	31	19
1943-44	32	1006	539	.536	31	17
1944-45	52	1828	998	.546	35	19
1945-46	37	1478	873	.591	40	24
1946-47	32	1339	815	.609	42	25
1947-48	27	1224	766	.626	45	28
1948-49	30	1377	867	.630	46	29

TABLE VII (Continued)

Season	No. of Games	Free-Throw Attempts	Free-Throw Goals	Percentage	Average Free-Throw Attempts per Game	Average Free-Throw Goals per Game
Game Totals (both teams)	460	16181	9574	.592	35.2	20.8
Major Games (both teams)	382	13703	8191	.598	35.9	21.4
Minor Games (both teams)	78	2478	1383	.558	31.8	17.7
1st Half (both teams)	200	3235	1932	.597	16.2	9.7
2nd Half (both teams)	200	3579	2091	.584	17.9	10.5
Winning Team	460	8449	5145	.609	18.4	11.2
Losing Team	460	7732	4429	.573	16.9	9.6
Home Team	448	8164	4818	.590	18.2	10.8
Visiting Team	472	8017	4756	.593	17.0	10.1
Intra-Squad Scrimmages (both teams)	75	2134	1204	.564	28.5	16.1
Practice Shots		5275	4112	.780		

This table shows total free-throw attempts and free-throw goals made by both teams for the 460 games. It also shows percentage of attempts scored and average number of attempts and goals per game.

The table also shows free-throw attempts and free-throw goals made, percentages of goals scored, and average number of attempts and goals per game for major and minor games, first and second halves, winning and losing teams, home and visiting teams and in intra-squad scrimmages and in practice shots without defense.

gave an Oregon guard two free throws at the basket. Oregon was one point behind—needing one free-throw goal to tie the score and two to win. Unfortunately, the player missed both free throws. The usual “hard luck” consolation remarks went around the dressing room but later in the evening, after things had cooled off, the boy was asked what he was thinking of when he toed the free-throw line. It was necessary to know what outside factors entered the picture, since the player was an expert at free-throw shots and consistently made 90 percent of his attempts in practice. He was also a “money player”—best when “the chips were down.” He was a tireless player and therefore fatigue was not the answer. After hesitating a moment, his reply was: “Well, Coach, I’ve been having a little trouble lately in shooting them short. I thought I would be sure, so I aimed at the back rim.” Needless to say, both shots hit the back rim squarely. It may be a very difficult task, but the more players learn to think *only* of *making* the free throw, the more they will improve their performance.

STYLES OF FREE-THROW SHOOTING

Close observation of different styles of shooting used in fifty-two major games played in New York City during the 1944-45 season indicate that the underhand free throw is the most accurate. Table VIII, Styles of Free-Throw Shooting, page 67 gives the results. Other studies made by the National High School Federation also bear this out. In this particular study there were 914 free throws attempted using the underhand style. Of this number 516 were successful, showing a percentage of .565. The two-hand chest shot was used 794 times, 422 with success, giving a percentage of .531. The one-hand shot was used 115 times, 58 with success giving a percentage of .504. In teaching the underhand shot coaches have used the argument that time must be spent in teaching a different type of shot than the player uses from the

field. They claim that a player will become proficient from the free-throw line by the use of the same type of shot that he uses from the field and that the additional practice will also aid his field-goal shots. This contention may have had some grounds during the war period when coaches did not have players more than a year and had limited time to spend with their players each day. However, to train players in free throwing is now important enough to be a major part of coaching. It will pay dividends to spend extra time in teaching the underhand free throw to most players.

TABLE VIII

STYLES OF FREE-THROW SHOOTING
(MAJOR GAMES IN MADISON SQUARE GARDEN, 1944-45)

	Underhand (2 hands)			Chest (2 hands)			One Hand			Total		
	FTA*	FTG**	Percentage	FTA	FTG	Percentage	FTA	FTG	Percentage	FTA	FTG	Percentage
1st Half Totals	450	261	.580	395	216	.547	68	38	.559	918	517	.563
2nd Half Totals	464	255	.550	399	206	.516	47	20	.426	910	481	.529
Game Totals	914	516	.565	794	422	.531	115	58	.504	1828	998	.546

This table shows a comparison of the underhand, chest, and one-hand styles of shooting free throws in fifty-two games. It shows the total number of attempts, total goals scored and percentage of attempts made in the first and second halves and totals. The report is for both teams.

* Free-Throw Attempts.

** Free-Throw Goals.

There are, of course, individual differences and every good rule has exceptions. If a player is able to make a high percentage of his free-throw attempts using the two-hand chest shot or the one-hand shot he should be permitted to do so, particularly on the college level. Stanley Peacock, a Yale player, asked if he could shoot his free throws from the chest. Asked if he knew his percentage from the previous year, he said that it was .700. "Pretty high," was the reply. "How about a demonstration?" Stan proceeded to make thirty-nine successive free throws from the chest before he missed. Needless to say, during that season he shot free throws from the chest and his average was .758.

Tony Lavelli, however, was the greatest free thrower it has been my pleasure to coach. As a matter of fact, Tony is the best free thrower in the history of college basketball since the days when one man was permitted to shoot all the free throws for his team. Tony shoots free throws with one hand. In four years of college basketball, he scored 564 free-throw goals out of 722 attempts—a .781 percentage. In 1948-49, he scored 215 free-throw goals out of 261 attempts for an .824 percentage, the highest of his entire career. According to records of the National Basketball Guide no other college player has approached these records either in a single season or throughout a four-year career in totals or averages per game. Anderson of Lafayette holds the all-time college record. He played in the years from 1915-19 when one man was privileged to shoot all the free throws for his team. Anderson's record was 764 free-throw goals out of 930 attempts, an .822 average over the four-year period. He used the underhand shot and taught this style for many years as a coach. The author agrees with Anderson but, of course, is always satisfied when a one-hand expert like Lavelli can sink them consistently (see photo, The One-hand Free Throw, in illustrated section).

These examples show that great shooters may use various

types of shots. However, they are the exceptions rather than the rule and the underhand shot is still the most accurate for most players. Again, the point is made that shooters like Stan Peacock and Tony Lavelli were accurate because their shots, regardless of style, were fundamentally correct and they disciplined themselves to consistent practice periods. Their shots had perfect wrist and finger action, perfect follow-through, and perhaps even more important, these boys *knew* they could make them—they had confidence.

There is no reason why players should not make 80 to 90 percent of their attempts in practice and why they should not approach this average in games, if the fatigue and mental hazards can be eliminated.

Chapter 6

Basketball Recoveries

OFFENSIVE AND DEFENSIVE REBOUNDS

(See photo, The Rebound, in illustrated section.)

REBOUNDING IS MORE IMPORTANT THAN ANY OTHER basketball fundamental except shooting. Possession of the ball is worth at least one-half a point to a team provided they do not lose the ball before getting a shot at the basket, as the shooting average is above .250 (better than one out of four). Naturally, the team that gains possession of the ball most frequently when it is free will win, provided it can match the other team in shooting accuracy. A random sampling of seventy-five major games was studied and the results are given in Table IX, Rebounds, page 71. It is significant to note the rebound performance of the winning team and of the home team.

As expected, the winning team usually gains more rebounds than the losing team. The home team usually has an advantage due to the fact that they are more accustomed to the manner in which the ball bounds from the basket or backboard. It is, of course, different on different courts. If the baskets are tight, the rebounds will be long; if the baskets are loose, the rebounds will be short. If the backboard is braced rigidly, the rebounds will be long; if it is braced loosely, the rebounds will be short. Until equipment is standardized, a visiting team should spend part of the practice prior to the game in rebounding to familiarize itself with the conditions. The fundamentals of proper rebounding are important enough to be taught all players so that they can get their share of re-

TABLE IX

REBOUNDS

	No. of Major Games	Offen- sive Re- bounds	Aver- age per Game	Defen- sive Re- bounds	Aver- age per Game	Total Re- bounds	Aver- age per Game
1st Half (both teams)	75	1564	21	2327	31	3891	51.9
2nd Half (both teams)	75	1601	21	2375	32	3976	53.0
Winning Team	75	1653	22	2536	34	4189	55.9
Losing Team	75	1512	20	2166	29	3678	49.0
Home Team	75	1643	22	2430	32	4073	54.3
Visiting Team	75	1522	20	2272	30	3794	50.6
Both Teams	75	3165	42.2	4702	62.7	7867	104.9

This table shows the offensive, defensive and total rebounds retrieved by both teams for seventy-five games. It also shows the average number of rebounds by both teams per game. Findings are also given for first half, second half, winning and losing teams, and home and visiting teams.

bounds. Proper balance, timing, jumping, and protection of the ball after it is retrieved are important factors. Individual rebound fundamentals and team rebound organization should demand a major part of the practice periods.

The average team takes sixty-seven field-goal shots and seventeen free-throw shots at the basket. This means that the ball is shot at the basket by both teams a total of 168 times during the progress of the game. If one-fourth of the field-goal attempts are made and three-fifths of the free throws are made, approximately 115 rebounds remain for the two teams to fight over during the progress of an average game. The entire thirteen-year period shows an average of only 105 rebounds per game but there has been an increase in recent

years. In many college games in 1949, there were as many as 140 rebounds. Obviously, recording and scouting will show the coach the strong rebounding opponents as well as his own strong rebounders. Strategy may be planned accordingly.

JUMP-BALL RECOVERIES

(See photo, The Center Jump, or Tip-Off,
in illustrated section.)

There was a time in basketball when the tip-off was one of the main plays of the game. Earlier books on basketball show many tip-off plays. With the elimination of the center

TABLE X

MISCELLANEOUS RECOVERIES,
(JUMP BALLS, AND INTERCEPTIONS)

	No. of Games	Jump Balls	Average per Game	Inter- ceptions	Average per Game
1st Half (both teams)	75	552	7.4	578	7.7
2nd Half (both teams)	75	608	8.1	518	6.9
Winning Team	75	634	8.5	546	7.3
Losing Team	75	526	7.0	550	7.3
Home Team	75	560	7.5	528	7.0
Visiting Team	75	600	8.0	568	7.6
Both Teams	75	1160	15.5	1096	14.6

This table shows the total number of jump balls and interceptions made in seventy-five games with the averages per game (both teams). It also shows the totals and averages for first and second halves, for the winning and losing teams and for the home and visiting teams.

jump, however, the importance of tip-off and jump ball plays has been minimized. It is true that the held ball is not as

important as some of the other phases of the game, such as the rebound. A study of seventy-five major games shows an average of sixteen jump balls during a game (see Table X, Miscellaneous Recoveries, page 72). Compared to more than 100 rebounds a game, the time spent on jump-ball work should not be as great. However, a team profits by having the sixteen jump balls. Too many coaches have neglected this part of the game almost entirely and as a result have lost the majority of the jump balls. The only way to determine a team's ability in this phase is to record the results. Most teams tip to certain men; find out who those men are. The jump ball toward the end of a game when the score is close may be worth a little time and effort.

Many players do not understand the technique of tipping the ball properly. Each player should have instruction in how to tip the ball ahead, behind, and to either side. It is equally important that players who expect to receive the tip know how to properly fake their men out of position and time their jumps for the ball.

INTERCEPTIONS

"Ball hawks" in basketball are the players coaches are always looking for. Coaches strive to develop men who can press the defense and steal the ball without fouling, players who can intercept a pass or dive for and recover a loose ball on the floor. These players are great contributors to victories. Very often a timely interception gains four points for a team—it saves two points that the opponents may make if they retain the ball and it gains two points that the interceptor's team may make by gaining possession.

In a crucial Madison Square Garden game that will never be forgotten, Oregon led Long Island by a fifteen point margin at the start of the second half. Long Island had several great "ball hawks" and their timely interceptions resulted in goals that cut down the Oregon lead. With ten seconds to play,

Oregon still held a two-point lead. Out of nowhere came a "ball hawk" who intercepted a pass and fed the ball to a teammate who tied the score. Long Island went on to win in overtime 56-55. Who received the credit?—the player who scored the basket. The interception was soon forgotten.

In spite of its great importance, players are rarely given credit for this skill. Since it can be objectively measured, why not let the player and the public know of his achievement? The interceptor should receive due credit. If players are given this credit it will furnish an incentive for both themselves and other players to improve and excel in this department. As long as scorers get all the praise, many players will want to score above all else—sometimes at the expense of team interest.

The "ball hawks" on the opposing team should be known so that play may be kept away from their areas as much as possible. Great caution should be used so that the ball will not be exposed to them. Table X, Miscellaneous Recoveries, page 72 gives the results of a study of a random sampling of seventy-five major games. The average of fifteen interceptions a game seems extremely low. In many games there are twice that number. Certainly more attention should be directed toward this part of the game. That "four point" interception may win many games.

Chapter 7

Basketball Errors and Their Implications

BASKETBALL TERMINOLOGY IS NOT WELL ESTABLISHED. Errors are not defined in the rule book as in baseball. For our purposes errors are meant to include loss of the ball (except by shooting for the basket) and personal fouls.

LOSS-OF-BALL

Obviously, a team cannot score without the ball. Therefore, everything that can be done to gain possession of the ball should be stressed by the coach. In addition to *gaining* possession, it is equally important to retain that possession until a scoring opportunity is presented.

Yale University played the University of Illinois in the first round of the N.C.A.A. tournament at Madison Square Garden in 1949. Illinois won the game 71-67. It was a thriller for Illinois to win and a heartbreaker for Yale to lose. Yale had enjoyed a six-point lead with a little more than three minutes to play. *An intercepted pass* gave Illinois a field goal but with two minutes to play, Yale still held a three-point advantage and possession of the ball. A Yale player was open going into the basket for what might have been the clincher. *A bad pass*, however, gave the ball to Illinois and they cashed in with a field goal. Illinois then *intercepted the throw-in* after the goal and scored again. Yale, in possession of the ball, went down the court but was guilty of traveling. This resulted in a fourth Illinois goal *on four*

straight losses-of-ball. Now two points behind, Yale again brought the ball to the front court and set up a play. Again, the ball was taken away from a Yale player and turned into a basket. *Five losses* in three minutes gave *five field goals* to the other team. Most coaches can think of many games that have been lost similarly. Loss-of-ball is, then, one of the most serious errors in the game.

Just how much it may cost a team when it loses the ball may be seen in the following illustration: Team A has the ball. Theoretically, this is worth a half point since it will succeed in one out of four shots if it does not lose possession. This is based on the assumption that the shooting percentage is at least .250. When the team loses possession of the ball without gaining a scoring opportunity they obviously give the opponents this half point. If Team A kept possession they would also have had a rebound possibility on missed shots which really makes the value of possession even greater to them than the half point. One point would be the minimum cost in losing the ball. The loss might be costly enough to make a difference of four points in the score—two points that Team A might score if they retained possession and two points that the opponents may score when they gained possession.

It is also conceivable, although a remote possibility, that there could be a maximum cost of eight points to a team that loses the ball. If Team A scored a basket and the shooter was flagrantly fouled in the act of shooting and made both free throws, he would give his team four points. If the ball was lost to the opponents and they executed such a play, the difference in the score would be eight points on one loss-of-ball. At least we may proceed on the supposition that loss-of-ball is costly.

A study of seventy-five games indicates that the average team loses the ball between fifteen and sixteen times a game. (See Table XI, Loss-of-Ball, page 78). The faster game, however, has seen an increase in losses-of-ball. Thirty games

checked in 1948-49 showed an average of twenty losses a game by each team. Many teams lose the ball as many as forty times during a game. Coaches should keep in mind that if they can cut down the losses by ten in a game, they have given their teams ten extra points minimum and it could be as many as forty or even more. It is therefore of great interest to the coach to know how the ball is lost and who loses it, both on his team and on the opposing team. If the coach knows who loses the ball on his own team he may work on fundamentals to improve this situation. If he knows which opponents lose the ball, he may plan strategy that will press those opponents and cause them to lose the ball more frequently.

The ball is lost primarily in three ways: (1) by bad passes, (2) by poor ball-handling, (3) by rule violations such as traveling or broken dribble. The ball may be lost, of course, by taking bad shots at the basket, or by taking any shot that does not score. The ball even changes possession when a goal is scored. However, these latter methods are taken care of through the records of scoring and rebounding.

It should be noted in Table XI that approximately three-fourths of the losses are due to bad passes and poor ball-handling. By paying particular attention to the most frequent offenders, instruction may improve the situation markedly. Passing drills that fit into the style of play to be used will help. Violations may also be decreased by covering the rule interpretations thoroughly, and insisting on strict adherence to the rules in all practices and scrimmages.

It is significant to note that all losses decrease markedly in the second half as compared to the first half. This would tend to eliminate the fatigue theory as a cause of losses. It may mean, however, that players are more tense in the early stages of the game and that it takes some time to settle down. This fact may have important meanings to the coach in regard to "pep talks" which will be discussed in a later chapter.

Loss-of-ball also occurs more frequently on foreign courts—particularly losses due to violations. This may be due to the fact that the visiting team is usually not familiar with the floor, lighting conditions, and similar factors. Perhaps this would indicate to the coach the advisability of working out on courts away from home prior to the game. If the game is to be played at night, practice should be held at night

TABLE XI

LOSS-OF-BALL

	No. of Games	Bad Passes	Average per Game	Violations	Average per Game	Poor Ball-Handling	Average per Game	Total Losses	Average per Game
1st Half (both teams)	75	467	6.2	329	4.4	471	6.3	1267	16.9
2nd Half (both teams)	75	362	4.8	257	3.4	450	6.0	1069	14.3
Winning Team	75	429	5.7	300	4.0	475	6.3	1204	16.1
Losing Team	75	400	5.3	286	3.8	446	5.9	1132	15.1
Home Team	75	449	6.0	260	3.5	423	5.6	1132	15.1
Visiting Team	75	380	5.1	326	4.3	498	6.6	1204	16.1
Both Teams	75	829	11.1	586	7.8	921	12.3	2336	31.1

This table shows the total number of times the ball is lost by bad passes, violations and poor ball-handling, and total in seventy-five games with the averages per game (both teams). It also shows the totals and averages for the first and second halves, for the winning and losing teams and for the home and visiting teams.

to get the same lighting conditions. No doubt the mental hazards of playing before unfamiliar and at times unsympathetic crowds are also factors that contribute to this situation.

Eliminate those losses! *A ball lost is a point lost* should be the slogan of every player and coach.

TABLE XII

PERSONAL FOULS

	No. of Major Games	Personal Fouls	Average per Game
Winning Team	75	1069	14.3
Losing Team	75	1183	15.8
Home Team	75	1073	14.3
Visiting Team	75	1179	15.7
Both Teams	75	2252	30.0

This table shows the number of personal fouls committed by both teams in seventy-five games with the average per game for the winning and losing team, home and visiting team and totals for both teams.

PERSONAL FOULS

(See photo, The Personal Foul, in illustrated section.)

Every coach owes it to the game to minimize as much as possible the committing of personal fouls by his team. Coaches also agree that there is no place in the game at any time for deliberate flagrant personal fouls. It is true, however, that this is one part of the game that needs careful study and attention. It is hoped that this book will help to bring about an improvement in the game by showing that the penalty for the personal foul is not sufficient and therefore needs revision. A study of seventy-five games indicates that the

average team commits an average of fifteen personal fouls per game. (See Table XII, Personal Fouls, page 79.)

The national average is even higher. In 1948, the National Collegiate Athletic Association report showed an average of 18.5 per team and this increased to 19.4 in 1949. Twenty major college teams averaged more than twenty-one fouls per game in 1949, and Davidson College, the team committing the fewest in the nation, averaged more than fourteen per game. In fact, there has been a steady increase in the personal fouls committed since 1944-45 when five fouls were permitted each player instead of four.

The penalty to a team for a defensive personal foul is only one-tenth of a point, unless it gives the opposing team two free throws. When a foul is committed and the offended team gets one free throw it is worth six-tenths of a point to them since the average team makes 60 percent of its free throws. When they make the free throw they must give the ball to the other team. Possession of the ball is worth at least five-tenths of a point since the average team scores at least one field goal in four attempts. This leaves one-tenth of a point net gain to the team that is fouled. A team that commits twenty personal fouls in a game might lose only two points (net) in the score. This is not much of a penalty and naturally invites players to foul rather irresponsibly, particularly when behind. As a matter of fact, if one team were to foul the opposing team every time they gained possession of the ball and before they had a chance to score a basket, the fouling team would win by a comfortable margin, since they would match field-goal opportunities against free-throw opportunities. There is obviously something wrong with the balance of the game in this instance. The penalty for the personal foul should always be so severe that a player will not consider it advantageous to foul.

One other criticism of the personal foul method is that key players often go out of the game by committing five personal

fouls. Increasing the number from four to five, as mentioned, did not remedy the situation nor did it cut down the number of personal fouls committed. On the contrary, it increased the number. In no other game do we lose key players because they make five mistakes in a game. If a player uses rough or unsportsmanlike tactics, he should be dismissed from the game for one infraction, as in football or baseball.

If a football player is guilty of holding several times in a game, he is not asked to leave the game. The penalty, however, is severe enough so that he will not hold if he can possibly avoid it. If the penalty for holding was two yards, for example, there would probably be holding on every play—regardless of efforts of coaches. Officials would also have a tendency to “call” the infraction more frequently; they hesitate before they measure off fifteen yards. Holding is not called unless it affects the play.

There are many interference rules in baseball. For example, a base runner may jump in front of a fielder to prevent the fielder from making a play on a ball. The runner is not asked to leave the game, but since he will be called out, the penalty is so severe that he cannot afford to break such a rule. In basketball, regardless of the coach's efforts, players are going to commit fouls when the penalty is not great. We are all familiar with the situation in the last moments of a close game. The trailing team will foul repeatedly in order to gain possession of the ball.

Players should not be deprived of a chance to continue playing because of rule infractions; neither should spectators be deprived of seeing the best players in action late in the game; neither should there be constant, deliberate fouling during the latter part of the game. None of these conditions will be remedied by allowing the players more personal fouls before they are asked to leave the game, or by asking players to refrain from fouling. The only remedy is to make the penalty severe. In other words, if the penalty were severe

enough, the player would not commit the foul and there would not need to be a rule that five infractions means the player must leave the game.

It has already been mentioned that knowledge of habitual personal foul offenders is valuable in coaching. Under the present rules plays may be directed at opponents who foul easily or at key men to cause them to commit fouls. The same tactics will, of course, be used against your team if your players cannot play without fouling.

In the Yale-New York University game in Madison Square Garden in December, 1948, an incident occurred that illustrates the point. Many of the sellout crowd came to watch Tony Lavelli. N.Y.U. wisely directed their offense at Tony, and at the half he had committed four fouls. Under these circumstances most coaches take a star player out of the game and hope to be able to use him sparingly before the fifth foul is committed. In this instance, it was decided to change the defensive assignments and Tony played very much "under wraps" defensively during the second half. The choices were: (1) to have him play only offensive ball, (2) let him foul out or (3) have him sit on the bench during the best part of the game. Generally, such a situation is not good for the player, team, or spectator.

In conclusion, the following suggestions are made to help remedy the personal foul situation:

1. More emphasis in coaching individual and team defense. This is particularly important on the junior high and high school level. Since the center jump was eliminated from basketball there has been a growing tendency to neglect defense. There is a tendency to let the offensive team shoot more freely because the opposing team will get the ball when a basket is scored.

2. Attention by the officials to the rule book so that only actual fouls are called. There is no question of the fact that many of the fouls called in the course of a normal game are not fouls at all according to the rule book. For example, in the latter part of the game, many fouls occur against the team that is trailing and trying

to gain possession of the ball. The rules state that a closely guarded player who withholds the ball from play for a period of five seconds shall have a held ball called. The 1949-50 rules say *shall* instead of *may* and it is hoped held balls will be called properly under this rule. The official often waits for bodily contact and then calls a foul. (See photo, The Held Ball, in illustrated section.) Attention to this point alone would cut down the average per game by several fouls.

3. There should be a greater penalty for the defensive foul. The rules committee did not solve the problem in 1949-50 by ruling that, in the last two minutes of the game, the offended team is given a free throw and the ball out-of-bounds following the free throw (made or missed). This rule takes away fast-break opportunities, slows down the game and does nothing about the problem existing during the first thirty-eight minutes of the game.

It is suggested that one free throw be awarded for all defensive fouls and that the free-throw goal count two points. The penalty for the offensive foul should be loss-of-ball to the opposing team—the same as a violation. A player should not be required to leave the game for committing personal fouls. The penalty should be severe enough to take care of the situation. Coaches are urged to try this plan in scrimmages and practice games.

Chapter 8

Scouting Data Pertinent to Psychology of Coaching

UP TO THIS POINT OBJECTIVE DATA HAVE BEEN INTERPRETED mainly for the purpose of coaching to improve various skills. The same objective data will now be interpreted as pertaining to the psychology of coaching.

Physical and mental condition, particularly the latter, have much to do with winning or losing basketball games. Regardless of the skill and all-round ability that a player or team may possess, unless physical condition and mental attitude are adequate, victory cannot be expected. For example, a team often enters a game feeling that there is little chance to win away from home, another may feel that it is unable to win in the second half because of the fatigue element. Still others may feel that they cannot do well because the game is highly competitive and the pressure is too great. Many practice players are not able to come through in games.

It is the purpose of this chapter to point out what the differences are in these various situations. It is hoped that these findings may help coaches to eliminate false impressions and be an aid to them in having their players and teams mentally right for the games. It is not claimed that objective measurements tell the entire story, or even that they are more valuable than subjective observations. It is true, however, that facts are a basis upon which to formulate plans and that knowledge tends to minimize superstitions and false con-

cepts. It might be added that athletes, generally speaking, are among the more superstitious and that more knowledge might improve this situation.

THE HOME TEAM AND THE VISITING TEAM

Many coaches have expressed the opinion that the home court is worth ten points or better to a team. In other words, the team playing at home has a ten-point advantage. In this study, an attempt was made to compare the home games with the games played away from home to determine if a difference does exist, and if so, what the difference is. The reader is referred to Table XIII, Home Team Survey, page 86, and Table XIV, Visiting Team Survey, page 87. In cases where games were played on a court common to both teams, they were both considered home teams and not included. Where both teams played on a neutral court away from home, both were counted as visiting teams. This accounts for the 448 home teams and 472 visiting teams in the 460 game survey. In 434 of these games, a home team played against a visiting team. Results other than shooting and scoring are given for 75 games.

It must be admitted that the home team does have an advantage. Of the 434 games included, the home team was on the long end of the score in 273 cases, which is a percentage of .629. Assuming that the home team does have an advantage, what are the reasons for and the significance of this fact

Table XIII shows a record of the home team in 448 games. It includes field-goal and free-throw attempts and goals, total scores and average score per game. Percentages of attempts scored and averages of attempts and goals per game are also given. For 75 home games, it includes total number and average per game of rebounds; losses of ball by bad passes, violations and poor ball handling; jump-ball recoveries; interceptions; personal fouls. It also shows number and percentage of games won and lost in 434 home games.

TABLE XIII
HOME TEAM SURVEY

Shooting Results	No. of Games*	At-tempts	Goals	Per-centage	Average per Game	
					At-tempts	Goals
Total Shots	448	30002	8398	.280	67.0	18.7
Free Throws	448	8164	4818	.590	18.2	10.8

Other Results	No. of Games	Total	Average per Game
Score	448	21614	48.2
Rebounds	75	4073	54.3
Bad Passes	75	449	6.0
Violations	75	260	3.5
Losses by Ball-Handling	75	423	5.6
Total Losses-of-Ball	75	1132	15.1
Jump Balls	75	560	7.5
Interceptions	75	528	7.0
Personal Fouls	75	1073	14.3

	No. of Games**	Games Won by Home Teams	Games Lost by Home Teams	Percentage of Games Won by Home Teams
Home Games Results	434	273	161	.629

* Only home team court games counted.

** Games not included played on neutral courts.

TABLE XIV
VISITING TEAM SURVEY

Shooting Results	No. of Games	At-tempts	Goals	Per-centage	Average per Game	
					At-tempts	Goals
Total Shots	472	31165	8203	.263	66.0	17.4
Free Throws	472	8017	4756	.593	17.0	10.1

Other Results	No. of Games	Total	Average per Game
Score	472	21162	44.9
Rebounds	75	3794	50.6
Bad Passes	75	380	5.1
Violations	75	326	4.3
Losses by Ball-Handling	75	498	6.6
Total Losses-of-Ball	75	1204	16.1
Jump Balls	75	600	8.0
Interceptions	75	568	7.6
Personal Fouls	75	1179	15.7

	No. of Games*	Games Won by Visiting Teams	Games Lost by Visiting Teams	Percentage of Games Won by Visiting Teams
Visiting Game Results	434	161	273	.371

Table XIV shows a record of the visiting team in the same manner that Table XIII shows a record of the home team.

* When both teams travel both are counted as visiting teams. Games not included played on neutral courts.

from a coaching standpoint? All the reasons for the difference cannot be measured objectively, but there are certain facts which may be helpful in the solution of this problem. Referring to Tables XIII and XIV, it will be noted that the shooting average of the visiting team is only .263 while that of the home team is .280. The free-throw performance is almost identical. However, as was mentioned in the treatment of loss-of-ball, this may mean that the home team is more accustomed to the court, lighting facilities, and similar factors. It is undoubtedly true also that the matter of fatigue is an important factor in the difference. To remedy this problem, arrive at the scene of games in plenty of time to have adequate rest before playing a game. It is also advisable to take a short work-out on the visiting court to become adjusted to the comparatively strange conditions.

Another factor that contributes to this difference is undoubtedly a purely psychological one. For years we have stressed the fact that the home team does have an advantage. Players often go into games away from home with the feeling that they are playing under a handicap. Coaches may help this situation by pointing out to their players that they actually have more time to rest while traveling than at home, where they are usually busy with studies, and other activities. It should be further pointed out to them that they are playing before spectators who know less about them than do their home fans, and this applies to their weak points as well as their strong points. Many players prefer to play away from home where their closest friends and relatives are not watching them. This is a very important psychological opportunity for the coach.

Last, but not least, another very important factor that applies to this problem requires the attention of all coaches and directors of basketball. There is little question but that the home crowd, when encouraged and permitted to become

hostile and discourteous toward the visiting team, does give the home team a distinct advantage. Coaches, players, and home fans who attempt to intimidate the officials also give the home team an unfair and unearned advantage. The fact that in 75 games 1073 personal fouls were called on the home team as compared to 1179 on the visiting team, no doubt has some connection with this. Still other significant data may be gained from the comparison of loss-of-ball through violations on home and visiting courts. 75 games show 260 violations for home teams compared to 326 for visiting teams. It must be kept in mind that loss-of-ball through a violation is far more serious to a team than having a defensive personal foul called. A personal foul, as has been explained, gives the other team one-tenth of one point. Losing the ball takes away the opportunity of that team to score and gives that opportunity to the other team. Using the one-out-of-four shooting percentage as a basis, this means that the team losing the ball loses one full point. Theoretically, this is ten times as serious as the personal foul when the penalty for the foul is one free throw.

Therefore coaches and directors of basketball should eliminate, so far as possible, improper conduct of spectators, players and coaches that in any way intimidate players or officials. This means that booing and other similar tactics must be eliminated. It means also that officials must have, and use, the right to dismiss players and coaches from the game or bench, when the occasion calls for such action.

A close study of Tables XIII and XIV indicates that the home team has the main advantage in field-goal percentage and in retaining possession of the ball. In many of the other factors no difference exists. Certainly visiting teams should win more than 37 percent of the time. Correcting factors mentioned and eliminating superstition may improve this situation.

THE WINNING TEAM AND THE LOSING TEAM

Table XV, Winning Team Survey, below, gives the data on the winning team and Table XVI, Losing Team Survey, page 91 gives data on the losing team. Naturally the percentages are higher for the winning team. In many cases,

TABLE XV
WINNING TEAM SURVEY

Shooting Results	No. of Games	At-tempts	Goals	Per-centage	Average per Game	
					At-tempts	Goals
Long Shots	460	6071	1342	.221	13.2	2.9
Medium Shots	460	12644	3169	.251	27.5	6.9
Short Shots	460	12494	5043	.404	27.2	11.0
Total Shots	460	31209	9554	.306	67.8	20.8
Free Throws	460	8449	5145	.609	18.4	11.2

Other Results	No. of Games	Total	Average per Game
Score	460	24253	52.7
Rebounds	75	4189	55.9
Losses-of-Ball	75	1204	16.1
Jump Balls	75	634	8.5
Interceptions	75	546	7.3
Personal Fouls	75	1069	14.3

This is a table that shows the record of the winning team in 460 games. It includes total field goal attempts and field goals, percentage of attempts scored, average of attempts and goals per game for long, medium, short areas and total. It also shows winning team free-throw attempts, goals, percentage of free throws scored and averages per game. It shows the winning

team total score and average score per game. It also shows the winning team record in 75 games of rebounds, losses-of-ball, jump balls, interceptions and personal fouls; totals and averages per game.

TABLE XVI
LOSING TEAM SURVEY

Shooting Results	No. of Games	At-tempts	Goals	Per-centage	Average per Game	
					At-tempts	Goals
Long Shots	460	7284	1319	.181	15.8	2.9
Medium Shots	460	13028	2533	.194	28.3	5.5
Short Shots	460	9646	3195	.331	21.0	6.9
Total Shots	460	29958	7047	.235	65.1	15.3
Free Throws	460	7732	4429	.573	16.9	9.6

Other Results	No. of Games	Total	Average per Game
Score	460	18523	40.3
Rebounds	75	3678	49.0
Losses-of-Ball	75	1132	15.1
Jump Balls	75	526	7.0
Interceptions	75	550	7.3
Personal Fouls	75	1183	15.8

This is a table that shows a record of the losing team in the same manner that Table XV shows a record of the winning team.

however, there is not a very great difference between the winner and the loser. A particular game will illustrate this point.

Of the five Oregon-Long Island games at Madison Square Garden, the most thrilling was the game in December, 1939. Because Oregon had won the National Collegiate Athletic

Association title the year before and Long Island won the National Invitational, there was great rivalry in the game. With fifteen minutes to play, Oregon led by fifteen points. With one second to play, the score was tied and Dolly King of Long Island missed a free throw, sending the game into overtime. In the overtime period, the teams matched baskets twice, then with twelve seconds to go, Oregon made a free throw and led by one point. In the last three seconds Dolly King again entered the picture. This time he tossed the ball underneath the outstretched arms of the Oregon center—the ball bounced three times on the rim and fell in for the winning basket! Long Island had won the game by overcoming great odds and fighting an uphill battle. Still, a team losing where the margin is this close could hardly be classed as a losing team. In some cases, losing close games of this kind actually gives a team the incentive or counter-irritant to win its succeeding games.

Careful scouting and planning will contribute to the winning habit. Added to this, however, are psychological elements which must supplement statistics, figures, scouting reports, and data of all kinds. Every game should be played with the idea of winning. Unless players and their coach have the confidence that they will win, they should not attempt to play any game. Coaches who pride themselves on being good losers usually lose frequently. They become experts at losing. They should pride themselves on being gracious losers and good sportsmen, and should take every lesson possible from a loss, as well as from a win. But the difference between the winner and the loser is very often the confidence that the coach has in winning a game and the extent to which he can instill that confidence into his players.

Along with these psychological factors, however, data in Tables XV and XVI, pages 90 and 91 will indicate the type of performance necessary to be in the winning or the losing class. Teams cannot be expected to win unless they have

reasonable ability. It is hoped that information offered here will aid coaches in knowing what to expect from a team and will help to bring the team up to a winning standard.

It is significant to note that the winning team has a .306 shooting average compared to .235 for the losing team. This is the greatest difference between the winner and the loser. Note that the losing team takes more long shots than the winning team, but that in the short area, the winning team takes many more and hits a much higher percentage. The winning team hits for a percentage of .404 in the short area compared to .331 for the losers. Even in the medium area, where all shooting is below par, the winning team's percentage is .251 while the losing team's is only .194.

It also should be noted that while the losing team takes a greater total of shots, this is due to the number of shots taken in the two outer areas. In the short area, the winning team takes an average of twenty-seven shots per game compared to an average of twenty for the losing team.

The winning team also excels in free throws. They have more attempts (eighteen per game compared to sixteen for the losing team) and make a .609 percentage while the losing team percentage is .573.

The winning team, then, works the ball in for close shots more often, shoots more accurately in all areas, and has more free-throw attempts and makes a higher free-throw percentage. In factors other than shooting, the difference is not so great, except in rebounding. As expected, the winning team usually has an advantage on the boards. The seventy-five games studied show that the winning team retrieved an average of fifty-six rebounds a game compared to forty-nine for the losing team.

From this report, a lesson is offered. Greater shooting ability and organization that will get shots from closer areas seem to be the major requisites for the winning team. Again, keep shooting percentage records for various areas.

THE FIRST HALF AND THE SECOND HALF

The performance of a team in the first half, as compared to that in the second half, is worth the careful attention of the coach. That is, if the coach likes to win, and it is understood that most of them do. In scouting one's own team, as well as the opponent's, it should be determined just how effective the team is in each half. If the opponent is a first-

TABLE XVII
FIRST-HALF SURVEY
(both teams)

Shooting Results	No. of Games	At-tempts	Goals	Per-centage	Average per Game	
					At-tempts	Goals
Total Shots	460	30129	7977	.265	65.5	17.3
Free Throws	200	3235	1932	.597	16.2	9.7

Other Results	No. of Games	Total	Average per Game
Rebounds	75	3891	51.9
Losses-of-Ball	75	1267	16.9
Jump Balls	75	552	7.4
Interceptions	75	578	7.7

This table shows first-half field-goal attempts, field goals, percentages of attempts scored, average number of attempts and goals per game, in 460 games (both teams). It also shows first-half free-throw attempts, goals, percentage of free-throw attempts scored and averages per game. For 75 games it shows first-half rebounds, losses-of-ball, jump balls and interceptions; totals and averages per game.

half team and tires in the second half, a coach may plan his strategy and attack accordingly. If the coach discovers that his own team is a first-half team, he may take measures to correct this situation early in the season.

Of course the major question is how teams become second-half teams. The answer lies very largely in the fatigue and psychological factors. Coaches of every championship team agree that to be a champion, a team must be strongest in the second half. Here, then, is another winning formula. Know the first- and second-half strength of your own club and of your opponents. Also, be sure that your team can do two things: improve its performance in the second half over its performance in the first half, and outplay the opponents in

TABLE XVIII
SECOND-HALF SURVEY

Shooting Results	No. of Games	At-tempts	Goals	Per-centage	Average per Game	
					At-tempts	Goals
Total Shots	460	31038	8624	.278	67.5	18.8
Free Throws	200	3579	2091	.584	17.9	10.5

Other Results	No. of Games	Total	Average per Game
Rebounds	75	3976	53.0
Losses-of-Ball	75	1069	14.3
Jump Balls	75	608	8.1
Interceptions	75	518	6.9

This is a table that shows a record of the second half (both teams) in the same manner that Table XVII shows the first-half record.

the second half. A team that can do this will win most of its games. Remember, you cannot guess at this; you get this information only through careful scouting or analyzing of your own team and of the opponent's.

Comparative data are available for the average team in both halves. Results are given in Tables XVII, First-Half Survey, page 94 and Table XVIII, Second-Half Survey, page 95.

One very significant fact may be derived from these results. For years it has been the belief that team performances become less efficient in the second half. Many have said that the game is too strenuous and that the fatigue element prevents teams from playing well late in the game. The mental hazard still persists among players that they cannot hold up in the second half. However, results show that even the *average* team shoots better and more often in the second half. The shooting percentage jumps from .265 in the first half to .278 in the second half. The average team loses the ball less in the second half. These are the major factors in which fatigue would affect the play.

It is true that in 200 games studied, free-throw accuracy decreased in the second half. The percentages dropped from .597 in the first half to .584 in the second half. This may indicate that pressure and mental factors are more responsible than fatigue in missed free throws. Certainly, if fatigue alone caused free-throw accuracy to decrease in the second half, it would also cause field-goal shooting accuracy to decrease correspondingly. The fact that there is a pause before the free throw, permitting the player to think over the situation with possible annoyance from the crowd, may be the answer. Also, the pressure is greater in the second half—particularly toward the end of the game.

In any event, coaches can partially disregard the second-half fatigue theory as far as shooting accuracy is concerned. This may be an important psychological aid in coaching.

Well-conditioned teams that do not tire in the second half, however, will shoot more accurately than poorly conditioned teams. No doubt the better the condition, the better the accuracy, provided the mental hazards can be eliminated. It is suggested that coaches keep comparisons in first- and second-half scrimmages as well as in games. Every effort should be made to improve individual and team play in each half. An added effort should then be made to make the second half stronger than the first.

PERFORMANCE ON VARIOUS LEVELS OF COMPETITION

Coaches are constantly looking for and striving to develop the competitive player—the boy who can come through when a game is close. Many players look great in practice but are unable to reach great heights in strenuous competition. With this thought in mind, the 460 games were divided into “major” and “minor” to see if a marked difference existed in the shooting performance of teams on the two levels. There are more data available in the major class—382 of the 460 games were in that classification. Seventy-eight games were considered minor, or practice games. The major and minor games were also compared to intra-squad scrimmages and also to practice shooting where no defense was encountered. The results of this entire comparison are found in Table XIX, Levels of Competition Shooting, page 98 and in Table XX, Major Games, page 100 and Table XXI, Minor Games, page 101. Each of these will be treated briefly.

Major games indicate an over-all shooting percentage of .270 and the shooting percentage for all games is .271, indicating very little difference. However, in the short area the percentage is .367 for major games but .372 in all games. This would indicate that it is a bit harder to work the ball in for close shots in major games. Because the difference is not great it may be stated that college players, at least, adjust well

TABLE XIX
LEVELS OF COMPETITION SHOOTING

	Field Goals										Free Throws		
	Long Shots			Medium Shots		Short Shots		Total Shots					
	At-		Goals	At-	tempts	tempts	Goals	At-	tempts	Goals	Per-	centage	percentage
	Games	tempts											
Major Games (both teams)	382	11313	2264	21247	4730	18435	6768	50995	13762	.270	13703	8191	.598
Minor Games (both teams)	78	2042	397	4425	972	3705	1470	10172	2839	.280	2478	1383	.558
Scrimmages (both teams)	75	1171	232	4848	1261	4501	1964	10520	3457	.329	2134	1204	.564
Practice Shots	*	2905	1046	3085	1632	3810	3304	14925	8474	.568	5275	4112	.780

This is a table that shows a comparison in field-goal and free-throw performance of teams playing in 382 major games, 78 minor games, 75 scrimmages and in practice sessions without defense. It shows long, medium, short and total field-goal attempts, field goals, and percentage of total field-goal attempts made. It also shows total free-throw attempts, free-throw goals and the percentage of free-throw attempts scored.

* Non-competitive shooting—no defense.

under competition. Shooting averages in the medium and long areas are almost identical to the all-game averages. Strangely enough, the free-throw average in major games is .598, which is slightly higher than the all-game average of .592.

As might be expected, minor game results show a higher shooting percentage. The average is .280, which is higher than the all-game average and considerably higher than the major game average. Shots in the short area are more frequent and the percentage is higher.

Seventy-five full game intra-squad scrimmages show a shooting percentage of .329, which is far above the major and minor game averages. Short shots are still more frequent and percentages higher in scrimmages. This may indicate to the coach that defense is lax in practice or that players become tense when spectators are present. If free throws in scrimmages fall below the average it may indicate lack of application during practice. Also, as in the case of minor games, some of the players have limited ability and are not capable of shooting as well as those who play in major games. This, of course, would have a bearing on all shooting. Fatigue and psychological factors should be at a minimum in scrimmages.

Practice shots including field goals from various areas, and free throws, were taken with no defensive men guarding the shots. Naturally, defense makes a big difference, but if a player has mastered a skill, he should be able to perform reasonably well under competition. The total practice shooting percentage shows an average of .568 for field goals and .780 for free throws. Particularly in free throws, there is no reason why players should not do better during a game since there is no defense and, with the exception of mental hazards or fatigue, conditions are the same as in practice. Theoretically, field-goal shots should not be taken unless fundamentally correct; that is, unless they are good earned shots. If this type of shot were always taken, it would compare favorably to the practice shot. Therefore, eliminating bad

shots may help coaches more closely to approximate the practice shooting average in games.

Table XIX, Levels of Competition Shooting, page 98 shows a decrease in shooting accuracy as the situation becomes more

TABLE XX
MAJOR GAMES*

Shooting	No. of Games	At-tempts	Goals	Per-centage	Average per Game	
					At-tempts	Goals
Long Shots	382	11313	2264	.200	29.6	5.9
Medium Shots	382	21247	4730	.223	55.6	12.3
Short Shots	382	18435	6768	.367	48.3	17.7
Total Shots	382	50995	13762	.270	133.5	36.0
Free Throws	382	13703	8191	.598	35.9	21.4
Score	No. of Games		Total Points		Average per Game	
	382		35,715		93.5	

This is a table that shows the record of both teams in 382 major games. It includes long, medium, short and total field-goal attempts and field goals, percentage of attempts scored and the average number of attempts and goals per game in each category. It gives the same information on free throws and also shows total scores and average score per game.

competitive. This again presents a psychological problem for the coach. It is particularly suggested that coaches carefully check the shooting performances of *each individual player* on the various levels of competition. It has been pointed out that team percentages may vary due to lack of

* A major game is a conference game or its equivalent where competition is at its highest level.

ability of some of the players engaged in a scrimmage or minor game. A player's individual record, however, compared to the record of teammates and opponents, will tell the coach whether he is a "money player."

TABLE XXI
MINOR GAMES*

Shooting	No. of Games	At-tempts	Goals	Per-centage	Average per Game	
					At-tempts	Goals
Long Shots	78	2042	397	.194	26.2	5.1
Medium Shots	78	4425	972	.220	56.7	12.4
Short Shots	78	3705	1470	.397	47.5	18.8
Total Shots	78	10172	2839	.280	130.4	36.4
Free Throws	78	2478	1383	.558	31.8	17.7
Score	No. of Games		Total Points		Average per Game	
	78		7061		90.5	

This is a table that shows the record of both teams in 78 minor games in the same manner that Table XX shows the record of both teams in major games.

SUBJECTIVE OBSERVATIONS AND THE PSYCHOLOGY OF COACHING

Subjective scouting information is equally as valuable as objective data, and this certainly applies in the psychology of coaching.

Personnel observations are particularly important in this regard. Conferences with players about their mental and

* A minor game is a non-conference or practice game where the competition is not at its highest level.

physical condition are just as important as coaching of skills on the court. Similarly, properly planned strategy and constructive meetings with the squad in which all take part in planning for a game are of paramount importance.

Confidence, competition, cooperation, loyalty and team morale are all products of subjective observations as well as objective data. It is not our intention to infer that teams can be coached entirely as a result of a testing and rating program. The coach must take the entire picture into consideration and develop his team to perform efficiently both mentally and physically.

Chapter 9

The Tall Man in Basketball

(See photo, The Tall Man in Basketball,
in illustrated section.)

THE TALL MAN (FROM SIX FEET FIVE INCHES TO SEVEN feet tall), when properly developed, is the greatest asset a basketball team can have. Regardless of any problem the tall man has presented to the game, coaches should constantly strive to develop and use the "big fellows."

The far West seems to be a territory where many tall men play basketball. Part of this is due to the fact that high school coaches have learned to have patience and work with these men while they are in the growing, awkward, uncoordinated stages. A story will illustrate the point:

At the University of Oregon, there was not a single season in twelve years during which we did not have three or four tall men, six feet five inches or over, on the squad. The greatest was Urgel "Slim" Wintermute who stood six feet eight inches. He was center on the national championship team of 1939 and was selected on almost every All-America team that year. Fortunately, he was under a good coach in high school that realized the value of a big man. While many high school coaches would have cut him off the squad, Scott Milligan, coach at Longview, Washington High School, stayed with "Slim" through the awkward stages and as a result, won state honors with him as a senior. When "Slim" Wintermute came to college, he had his full height but weighed only 165 pounds. He was not aggressive and many times during his freshman and sophomore years, it appeared that he might not make the grade as a college player. In the junior year, how-

ever, he had developed into a better than average college player. As a senior, he was the difference between just a good college team and a national championship team.

Similar stories can be told about many tall men. It takes patience and work to develop them. But in return, the hard work may pay off in a championship, in addition to the values the boy has received from playing the game. Because of the tremendous value of the tall man, his appearance in the game has created many problems—mostly for the coaches that do not have them.

What shall we do with the tall man in basketball? This has been a leading question in the game for many years. Various rule changes were made to curb the effectiveness of the tall man. The center jump, which used to follow each goal, was eliminated after free throws in 1936 and after all goals in 1938. Now the ball is awarded to the opponent after each goal. It was thought that this would lessen the value of the tall man in the game unless he was a good all-round player, because he could not be used merely for getting the center jump. Result: more tall men and their effectiveness not curbed. The big fellow merely had more stamina from not having to jump, so that he could better play other parts of the game.

The second restriction of the big men was the passing of the three-second rule which prevents the offensive player from standing in the free-throw lane more than three seconds. This change came in 1936 and with certain variations has been continued in the game. Result: still more tall men with no apparent improvement in all-round ability. In other words, the big man is still playing and is just as effective as ever.

Many insist that the tall man should not be legislated against, any more than we should legislate against the fast man, or the expert shot. Many coaches believe that the tall man can be stopped effectively by proper defensive measures. Others believe that the only way to stop a tall man is to have

one a little taller and a little better. The entire problem reached a climax in 1944 and 1945 when seven-foot Bob Kurland almost single-handed led Oklahoma A & M to two national championships. During the same era, George Mikan, a six-foot nine inch giant at DePaul University of Chicago, was dominating most of the games in which he played. As a result, additional legislation was considered to curb the tall man. Most of the suggestions had to do with enlarging the three-second area in some way so that the tall man could not take a position so close to his offensive basket. Many still desire a change of this kind although since World War II, this problem has lessened with the improvement in material and coaching. Perhaps part of the problem took care of itself when Bob Kurland and George Mikan finished college, but it must also be remembered that they dominated the game during a period when material and coaching were at a low ebb.

Some have advocated putting a height limit on players, thereby eliminating the extremely tall man from the game. However, most coaches and basketball followers agree that such a limitation would not be fair to the tall men. Basketball is one of the few sports that they are able to play; they are seldom outstanding in football or in baseball and no legislation should be put into effect that would deprive them of playing a game that offers them as much all-round value as the game of basketball.

However, the tall man still presents a problem to the game. The results of this study and the information contained herein may help coaches to find a solution to this problem.

A total of eighty players over six feet four inches were selected for this part of the study. These players are listed and the results given in Table XXII, Shooting By Tall Men, page 107. It will be noted that the players come from all sections of the country, where different styles of play are used.

Shot attempts and goals were charted and recorded in the three areas for these men. The results are significant. The

shooting averages compare favorably to the average for all players in each area but this does not tell the complete story. These men took 53 percent of their shots and made 65 percent of their goals in the short area. The average player takes 36 percent of his shots and makes 50 percent of his goals in this area. This represents a great difference. In the medium area, the tall man takes 38 percent of his total shots and makes 29 percent of his goals. The average player takes 42 percent of his shots and makes 34 percent of his goals in this area. Therefore, there is little difference in the medium area. In the long area, however, the tall man takes only 9 percent of his shots and makes only 6 percent of his goals, while the average player takes 22 percent of his shots in this area and makes 16 percent of his goals.

In other words, the tall man makes *94 percent* of his total field goals in the short and medium areas. These figures would indicate that he is a threat mainly in the areas close to the basket.

Several suggestions seem to be in order that will improve the game and still enable the tall man, if he is a good all-round player, to participate. Some of these follow:

1. Consider widening the free-throw lane from six to twelve feet and make this entire lane a restricted three-second area. This would not only keep the tall man, or any player, out of that area, but it would open up the middle lane so that zone defense would be of less value and teams would work the ball into the basket with less difficulty. The change would relieve congestion under the basket.

The Fordham-Columbia experimental game played in 1945 and described in Chapter 10 was played with the suggested widened lane (see illustrated section).

A vote of the spectators attending the game was taken. Seventy percent voted for the change. The officials that worked the game and many of the coaches present favored the change also. As soon as another group of giants like Bob

TABLE XXII

SHOOTING BY TALL MEN

Player	School	Height	No. Games	Long Shots		Medium Shots		Short Shots		Total Shots	
				A*	G**	A	G	A	G	A	G
Troutwine	Phillips Oil. A.A.U.	6' 8"	1	0	0	1	0	1	1	2	1
Holub	Long Island Univ.	6' 6"	1	1	0	1	0	9	5	11	5
Beenders	Long Island Univ.	6' 6"	2	17	3	4	1	6	2	27	6
Fortenberry	Phillips Oil. A.A.U.	6' 9"	1	0	0	3	0	4	1	7	1
Hays	Univ. of Oregon	6' 7"	53	23	2	220	41	504	169	747	212
Borrevik	Univ. of Oregon	6' 8"	29	23	5	141	25	187	82	351	112
Reisman	Oregon State Coll.	6' 6"	2	3	1	9	4	6	3	18	8
Conklin	Oregon State Coll.	6' 5"	7	5	0	17	5	17	3	39	8
Grenier	Union Oil. A.A.U.	6' 6"	3	0	0	7	2	22	7	29	9
Mandic, J.	Oregon State Coll.	6' 5"	42	14	3	143	36	246	110	403	149
Mandic, F.	Oregon State Coll.	6' 5"	8	1	1	24	6	34	11	66	18
Ford	Univ. of Oklahoma	6' 5"	1	0	0	0	0	5	3	5	3
Jackson, L.	Univ. of Oregon	6' 8"	10	5	0	27	2	38	5	70	7
Marshik	Univ. of Oregon	6' 7"	46	137	18	174	38	197	69	508	125
Anderson	Univ. of Oregon	6' 7"	33	147	35	422	115	135	54	704	204
Borcher	Univ. of Oregon	6' 5"	17	34	4	69	24	54	23	157	51
Hilton	Univ. of Idaho	6' 8"	10	7	3	28	8	69	32	104	43
Nelson	Washington State Coll.	6' 5"	8	3	0	40	11	41	16	84	27
Schlichting	Univ. of Washington	6' 5"	7	2	0	19	3	39	14	60	17
Silver	Univ. of Oregon	6' 5"	28	53	9	247	49	191	56	491	114
Jewel	Univ. of Oregon	6' 8"	2	2	0	11	2	10	4	23	6

This table shows the field goal shooting performances of eighty college players over six feet four inches in height. It also shows long, medium, short, and total field-goal attempts, field goals, averages per game, and percentages of attempts scored.

* Attempts.

** Goals.

TABLE XXII (Continued)

Player	School	Height	No. Games	Long Shots		Medium Shots		Short Shots		Total Shots	
				A*	G**	A	G	A	G	A	G
Jennings	Washington State Coll.	6' 5"	14	36	10	120	34	56	19	212	63
McDonald	Univ. of Washington	6' 6"	10	15	3	69	10	45	12	129	25
Lindeman	Washington State Coll.	6' 8"	7	4	1	48	16	61	26	113	43
Wiley	Univ. of Oregon	6' 8"	30	46	10	147	32	256	87	449	129
Warren	Oregon State Coll.	6' 6"	17	11	1	63	15	76	24	150	40
Rocha	Oregon State Coll.	6' 8"	16	5	1	61	11	242	96	308	108
Henningson	Oregon State Coll.	6' 7"	5	4	1	22	8	13	5	39	14
Martin	Oregon State Coll.	6' 9"	4	0	0	10	1	15	7	25	8
Phoenix	Oregon State Coll.	6' 9"	7	1	0	27	4	70	24	98	28
Nichols	Univ. of Idaho	6' 9"	9	4	1	39	8	83	38	126	47
Bray	Univ. of Washington	6' 6"	30	4	1	86	12	248	83	338	96
Puddy	Univ. of Oregon	6' 5"	11	2	0	40	8	37	14	79	22
Arndt	Oregon State Coll.	6' 5"	4	2	0	22	5	39	12	63	17
Hanson	Washington State Coll.	6' 5"	4	3	1	25	6	31	10	59	17
Peterson	Washington State Coll.	6' 8"	6	9	3	30	13	42	16	81	32
Ogilvie	Oregon State Coll.	6' 5"	3	18	4	15	2	15	7	48	13
Ford	Univ. of California	6' 6"	4	5	0	18	5	29	10	52	15
Folen	Univ. of Washington	6' 5"	1	2	0	7	1	3	0	12	1
Vuiachich	Oregon State Coll.	6' 7"	1	0	0	4	1	6	1	10	2
Schaeffer	Long Island Univ. —	6' 7"	7	5	1	46	9	30	8	81	18
Wintermute	Univ. of Washington	6' 6"	61	94	13	364	97	375	146	833	256
Mallory	Univ. of Oregon	6' 8"	4	11	4	25	2	29	12	65	18
King	Univ. of Washington	6' 5"	1	1	1	2	0	2	1	5	2
	Long Island Univ. —	6' 5"	1	1	1	2	0	2	1	5	2

TABLE XXII (Continued)

Player	School	Height	No. Games	Long Shots		Medium Shots		Short Shots		Total Shots	
				A*	G**	A	G	A	G	A	G
Gilmur	Univ. of Washington	6' 5"	12	3	1	46	4	125	42	174	47
Romano	Oregon State Coll.	6' 5"	25	14	1	98	24	66	30	178	55
Otten, Don	Bowling Green State U.	6' 11"	4	1	0	9	2	61	25	71	27
Way, Walter	Cornell Univ. -	6' 6"	2	1	0	7	1	15	5	23	6
Kent	Rensselaer Poly. Inst.	6' 5"	1	2	0	6	1	3	1	11	2
Schultz	Hamline Univ.	6' 7"	1	1	0	7	1	19	2	27	3
Mikan, George	DePaul Univ.	6' 9"	5	0	0	17	3	121	64	138	67
Thomas	Univ. of Tennessee	6' 6"	2	1	0	14	3	13	5	28	8
Barnett	Univ. of Tennessee	6' 8"	2	0	0	2	0	16	3	18	3
Kamp	Canisius Coll.	6' 5"	1	0	0	4	0	12	2	16	2
Budd	Temple Univ. -	6' 6"	1	5	0	11	0	5	4	21	4
Hewson	Temple Univ. -	6' 6"	1	0	0	3	0	5	2	8	2
Dorn, Bob	Coast Guard Academy	6' 5"	1	2	1	11	1	17	2	30	4
Peterson, Ed	Cornell Univ.	6' 9"	1	0	0	3	0	3	2	6	2
Burke, N.	Univ. of Akron	6' 7"	1	0	0	5	1	2	0	7	1
Benson, M.	Brooklyn Coll.	6' 5"	1	3	0	2	1	5	5	10	6
Schayes, A.	New York Univ. -	6' 5"	6	2	0	35	10	64	21	101	31
Risen, A.	Ohio State Univ. -	6' 9"	2	0	0	4	0	26	9	30	9
Jones, L.	Western Kentucky	6' 5"	1	0	0	9	3	11	4	20	7
Schoon, M.	Valparaiso Univ.	6' 9"	1	0	0	2	0	12	4	14	4
Ludka, J.	Syracuse Univ. -	6' 10"	1	0	0	3	0	7	2	10	2
Kurland	Oklahoma A. and M.	7' 0"	3	1	0	17	5	32	13	50	18
Summers	St. John's Univ. -	6' 5"	11	2	0	32	5	116	39	150	44

TABLE XXII (Continued)

Player	School	Height	No. Games	Long Shots		Medium Shots		Short Shots		Total Shots	
				A*	G**	A	G	A	G	A	G
Prior	Harvard Univ.	6' 6"	4	0	0	5	0	34	11	39	11
Hauptfuher	Harvard Univ.	6' 6"	2	4	0	10	2	17	7	31	9
Gale, Robert	Cornell Univ.	6' 6"	2	9	2	7	1	6	2	22	5
Maddock	Northwestern Univ.	6' 6"	1	0	0	5	1	14	6	19	7
Cooper	Duquesne Univ.	6' 6"	2	2	0	8	2	28	14	38	16
Budko	Columbia Univ.	6' 6"	2	0	0	9	3	30	14	39	17
Forman	Holy Cross Coll.	6' 6"	2	0	0	2	0	9	2	11	2
Yardley	Stanford Univ.	6' 5"	1	0	0	3	0	9	3	12	3
Mulloy	Dartmouth Coll.	6' 6"	1	0	0	1	0	3	1	4	1
Smith	Harvard Univ.	6' 6"	2	5	0	8	0	16	6	29	6
Greene	Univ. of Illinois	6' 7"	1	0	0	7	1	8	3	15	4
Osterkorn	Univ. of Illinois	6' 5"	1	0	0	8	1	11	4	19	5
Lind	Univ. of Connecticut	6' 6"	2	0	0	5	2	17	5	22	7
Total			676	824	145	3322	750	4576	1692	8722	2587
Average per Game (team of 5 players)			135.2	6.09	1.07	24.6	5.55	33.8	12.5	64.5	19.1
Percentage					.176		.226		.370		.297

Kurland and George Mikan appear, the proposal will no doubt be considered again. It is indeed strange that the rules permit an offensive player to stand within three feet of the basket on either side of the lane but do not permit a player to stand any place in the lane out to the foul line—a distance of fifteen feet from the basket. It would seem that the somewhat antiquated markings of the court rather than the needs of the game have dictated the rules. However, a rule change is not in order until further experimentation and research have been conducted.

2. It is urged that consideration be given to allowing only one point for baskets scored in the short area. This would definitely take away the effectiveness of any player who could only score close to the basket. Since the tall man has the advantage in this area, the change would make it less advisable for coaches to use him unless he could play the entire game well.

If the widened lane were adopted, it might be well to count all field goals within that area one point and all other field goals two points. Experimentation in practices and intramural or practice games is urged along this line.

3. Coaches should teach big men a shot that may be used in the long area so that defensive players will not be safe in running back to the keyhole and waiting for the opponent. If big men could shoot long shots accurately, it would (a) tend to relieve congestion under the basket on both offense and defense, (b) open up the game, (c) cut down the effectiveness of the zone defense and (d) make the big man a greater asset to his team.

4. In playing against an opposing player who is tall and can only score close to the basket, defensive measures should be taken accordingly. First, a defensive player may play in front of him or to the side so that it is difficult to get the ball to him. Second, defensive players away from the ball may drop into the keyhole to help tie up the tall man, and third, measures may be used to effectively screen him from the backboards.

5. Have patience and work hard to develop the big man. Try to

have big men on your squad because, no matter what changes are made in the rules, a good big man will always be valuable in basketball.

It must be stressed again that radical, immediate rule changes are not intended. It is suggested, however, that coaches try out these ideas in practice scrimmages and in practice games.

Chapter 10

A Proposed Area-Method of Scoring*

THE HOME RUN IS THE MOST SPECTACULAR PLAY IN BASEBALL. Parks have been built for particular hitters so that the fans will see an occasional home run. The baseball has been made more lively so that the home run will be more possible. Correspondingly, the long field goal is the most spectacular play in basketball. In spite of this fact, it is used sparingly in many sections of the country. The home run in baseball, of course, is worth more than the single. In basketball, however, the long field goal from, let us say, forty feet out, counts the same as the field goal under the basket. Since the data indicate clearly that it is much more difficult to score from the longer areas, why should not goals from the longer areas be worth more than goals under the basket?

In addition to the percentage differences in shooting from different areas, there are two other major reasons for considering an area-method of scoring—the reasons are the zone defense and the tall man.

The zone defense

It has been observed that many teams are using this type of defense which does not project out much more than twenty-four feet from the basket. In many sections of the country teams that are using the one-hand shot almost exclusively are

* The area-method of scoring in basketball is suggested for use by instructors and intra-mural coaches as an interesting variation of the regular game. "Area basketball" has proved popular to those who have tried it.

not effective in shooting beyond this distance. Therefore when those two situations exist—the team that cannot shoot long and the zone defense—there is not much of a basketball game after the defense is set. If more credit is given for the long field goal, it might draw out the zone defense and also encourage all players to learn a shot that can be made from a long distance.

The fact has been pointed out in Chapter 9 that the tall man does most of his scoring in the areas close to the basket. If a score in this short area counted less, it would minimize the importance of the tall man and he would not be used unless he could play all of the game well.

Further, to restrict the tall man it was suggested in Chapter 9 that the restricted three-second area be increased. The suggestion was made that the free-throw lane be increased from a width of six feet to twelve feet. The same rules that are now in use would then apply. However, on a jump ball in the lane, the ball is tossed up at the free-throw line and no one is allowed inside the lane until the ball is tapped. This widened lane is suggested to permit the smaller man to have a better chance to get rebounds, to relieve congestion under the backboards, and to restrict the tall man in scoring under the basket. It seems inconsistent to restrict players from coming closer to the basket than the foul line and then permitting them to be only three feet from the basket on the sides.

Other advantages to the area-method of scoring are that: (1) it gives the team behind a better chance in the latter part of the game; (2) it is more attractive to spectators since they see the "home run" of basketball more often; (3) it encourages a more wide-open style of play which appeals to players and spectators.

THE FORDHAM-COLUMBIA EXPERIMENTAL GAME

The suggestions that have been mentioned were made to the New York basketball coaches and sportswriters in 1944. As

a result, an experimental game was played between Columbia University and Fordham University in the Columbia gymnasium, February 7, 1945 (see illustrated section). Because three scoring areas were thought too complicated for the officials, it was decided to divide the court into two areas. The short area extended from the basket to a radius of twenty-one feet and the long area was that area beyond a radius of twenty-one feet. The rules were as follows: for each field goal made inside the twenty-one foot area the usual two points were scored; for each field goal made outside the twenty-one foot area, three points were scored. If the shooter touched the area line on the take-off, only two points were allowed. However, if the shooter's impetus carried him inside the short area after the shot, the goal counted three points.

The foul lane was widened from six to twelve feet and the regular three-second rule applied throughout the entire new area; that is, no offensive player was permitted to remain in this area for more than three seconds with or without the ball.

Excerpts from Irving T. Marsh's account of the game in the New York *Herald Tribune*, February 8, 1945, are as follows:

From the spectators' point of view, the new rules provided more excitement, more wide-open basketball and a decided accent on set shooting.

The crowd voted 60-40 in favor of the 3-point basket for a long shot scored outside a twenty-one foot arc and 70-30 in favor of widening the foul lane.

Most of the coaches present, however, were not too pleased with the new regulations, but nearly all agreed that widening the foul lane had distinct merit since it opened up the game and prevented mad scrambles under the basket as well as dropping the emphasis on big men.

To this observer the new rules definitely provided a game with more action and much more excitement, but if it really gets wild and wooly there is no telling what may happen. The scorers and officials particularly found it extremely difficult to keep up with the play, but both men who worked the game, Chuck Solodare and John Norton, liked the innovations in spite of the added burden.

The game might have been even more successful and proved the points better if one of the teams had used a zone defense. Unfortunately both teams played man-to-man. Also, neither team had any exceptionally tall players.

Following this game other games were played in various sections of the country and the author conducted numerous games of this type among service teams. In practically all cases the reaction was favorable to both changes.

In one Army game a team was twelve points behind with two minutes to go. Four long field goals were scored and because each counted three points, the score was tied and the game went into overtime. The original leader finally won by two points. This indicates how the area-scoring plan gives the team behind a better chance.

It is suggested that further attention be given to these ideas and that coaches and instructors of basketball experiment with them in intramural scrimmages and in practice games.

A NEW AREA-SCORING SUGGESTION

A special study was made to further analyze the problems of the tall man and the zone defense, and to give due credit for shots from various distances from the basket (see Table XXIII, Area Scoring, page 117). Sixty major games in which there was a difference in the score of five points or less were selected from the various season records included in the survey. These games were then scored by the area method of counting one point for a goal in the short area, two points for a goal in the medium area, and three points for a goal in the long area. The area scores were then compared to the original scores. In twenty-eight of the sixty games, the original losing team either tied the score or won under the area method. It is significant to note that in practically all of these games where the winner was changed there was a tall man on the original winning team. It is also evident from the data of the entire survey that lessening the value of the goal in the short area would minimize the

TABLE XXIII

AREA SCORING
(60 Major Games)

Original Score 5 points Difference or Less

This table shows original scores of 60 major games where the final score was 5 or less points difference, compared to area scores for the same games. Area scores count 1 point for each goal in the short area, 2 points for each goal in the medium area and 3 points for each goal in the long area.

Season	Game	Original Score	Area Score
1936-37	Oregon State Coll.	28	22
	Univ. of Washington	27	20
"	Washington State Coll.	36	35
	Univ. of Washington	33	38*
"	Univ. of Oregon	35	36
	Oregon State Coll.	34	30
"	Univ. of Oregon	40	36
	Washington State Coll.	36	39*
"	Univ. of Oregon	31	26
	Univ. of Idaho	29	26**
1937-38	Univ. of Oregon	50	44
	Washington State Coll.	46	45*
"	Univ. of Oregon	32	34
	Oregon State Coll.	36	32*
"	Univ. of Oregon	34	31
	Univ. of Idaho	35	35
"	Univ. of Oregon	37	30
	Univ. of Washington	40	35
"	Oregon State Coll.	32	29
	Univ. of Idaho	34	36
1938-39	Univ. of Oregon	54	49
	Univ. of California	49	51*
"	Oregon State Coll.	35	35
	Univ. of Idaho	30	35**

* Area method changed winner of game.

** Area method caused tie game.

TABLE XXIII (Continued)

Season	Game	Original Score	Area Score
1938-39	Univ. of California	42	43
	Univ. of So. California	39	38
"	Univ. of Oregon	35	42
	Univ. of Idaho	31	38
1939-40	Long Island Univ.	56	56
	Univ. of Oregon	55	53
"	Wayne University	32	31
	Univ. of Oregon	29	26
"	Univ. of Oregon	37	32
	DePaul University	39	35
1940-41	Univ. of Oregon	36	34
	Oregon State Coll.	35	27
"	Univ. of Oregon	42	44
	Temple University	45	44**
"	Univ. of Oregon	34	30
	Duquesne Univ.	37	39
1941-42	Long Island Univ.	33	27
	Univ. of Oregon	31	28*
"	Duquesne Univ.	33	33
	Univ. of Oregon	28	24
"	DePaul Univ.	27	19
	Univ. of Oregon	23	19**
1942-43	Univ. of Oregon	42	38
	Oregon State Coll.	38	34
"	Univ. of Oregon	30	25
	Univ. of Washington	31	27
"	Univ. of Oregon	47	40
	Washington State Coll.	45	38
1943-44	Univ. of Oregon	38	59
	Univ. of Washington	40	63
"	Univ. of Oregon	40	33
	Washington State Coll.	36	34*
"	Oregon State Coll.	33	35
	Univ. of Washington	38	36
1944-45	University of Utah	36	47
	St. John's University	39	47**



Above: YALE'S 1949 CHAMPIONS LEAVE NEW YORK ON FLIGHT TO SAN FRANCISCO. First appearance of a Yale team on the Pacific Coast. *Photo courtesy American Airlines.*

Below: OREGON'S 1939 NATIONAL CHAMPIONS RETURN FROM MADISON SQUARE GARDEN. First Oregon team to go East. *Photo courtesy Photographic Illustrations Inc.*





(See page 46)
**SHOOTING
 A BASKET.**
 The ball finds
 its mark—the
 ultimate goal
 of all basket-
 ball effort.

THE ONE-HAND SHOT. Ore-
 gon's Bob Hardy (No. 40) gives a
 perfect illustration of the one-hand
 shot as *All America* Laddie Gale
 (No. 28) waits for possible re-
 bound. *Photo courtesy Warren
 Teter.*





(See page 52)

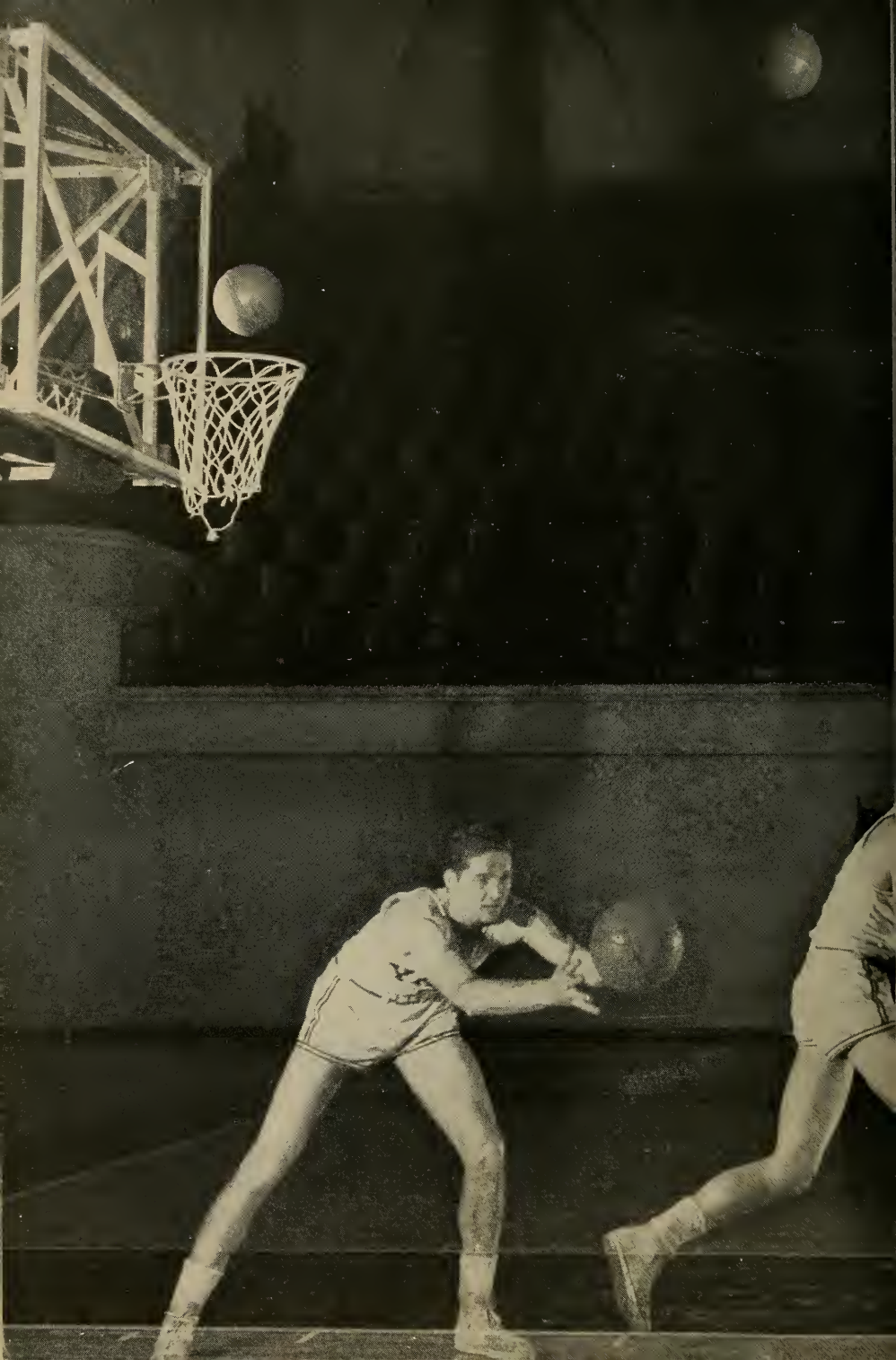
THE SHORT SHOT. Ted Anderson, star Yale forward, goes high into the air for a short "lay up" shot in Yale-Navy game.

Photo courtesy The Yale News.

(See page 54)

THE MEDIUM SHOT. Tony Lavelli illustrates a shot from the medium area in Yale-Columbia game, using the left-hand hook style. *Photo courtesy The Yale News.*







(See page 56)

TONY LAVELLI
DEMONSTRATES
HIS FAMOUS
HOOK SHOT.

*Photo courtesy
Ralph Morse for
LIFE magazine.*



(See page 103)

THE TALL MAN IN BASKETBALL. George Mikan, 6' 9" Minneapolis Laker and former All America DePaul player, uses his height to tip in a goal under rather adverse conditions. *World Wide Photos.*



(See page 57)

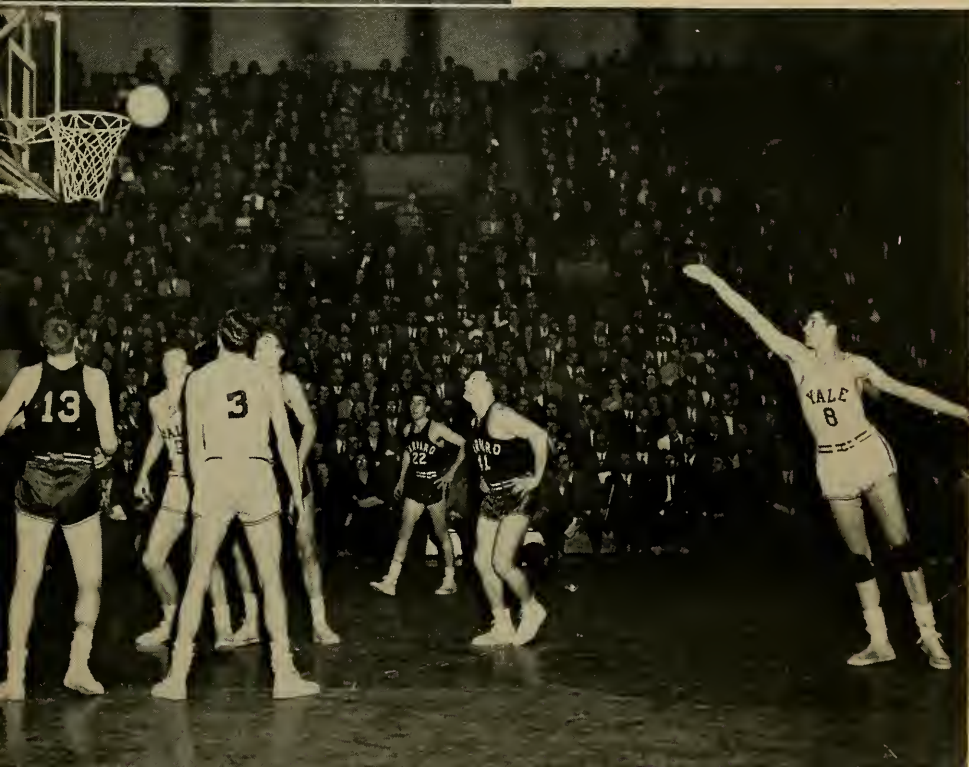
THE TWO-HAND SHOT. Dick Joyce, 1949-1950 captain, shows starting position of the two-hand set shot.

Photo courtesy The Yale News.

(See page 68)

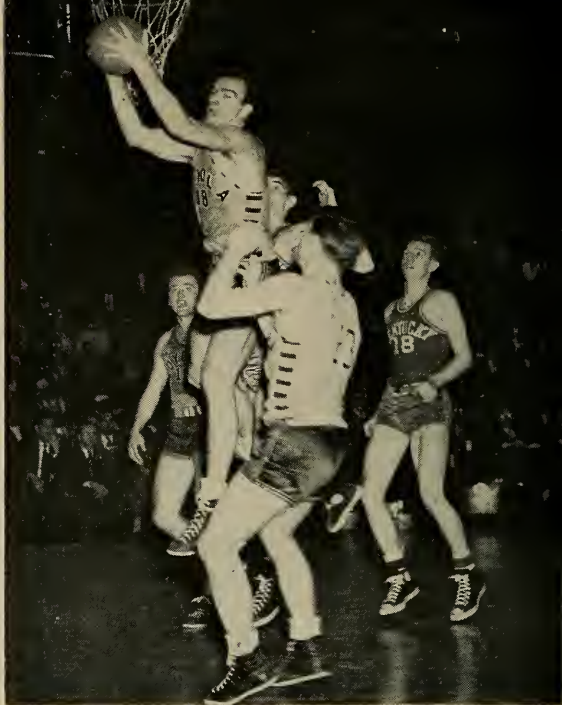
THE ONE-HAND FREE THROW. Tony Lavelli, Yale's All America and modern collegiate free-throw champion, sets new major college scoring record (his 1871st point) in Yale-Harvard game. Notice perfect follow through in this example of one-hand style free throw. *Photo courtesy*

The New Haven Register.



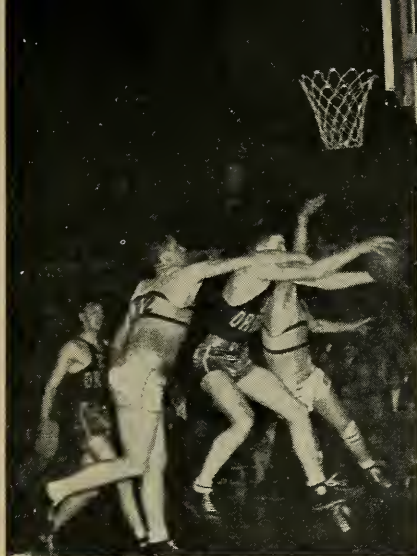
(See page 70)

THE REBOUND. Jack Kerris, Loyola center, gives a perfect illustration of rebounding as Loyola upsets favored Kentucky in 1949 New York Invitational Tournament. *World Wide Photos.*



(See page 72)

THE CENTER JUMP OR TIP-OFF. Center shows excellent jumping form as traditional Oregon-Oregon State game gets under way. *Photo courtesy Warren Teter.*

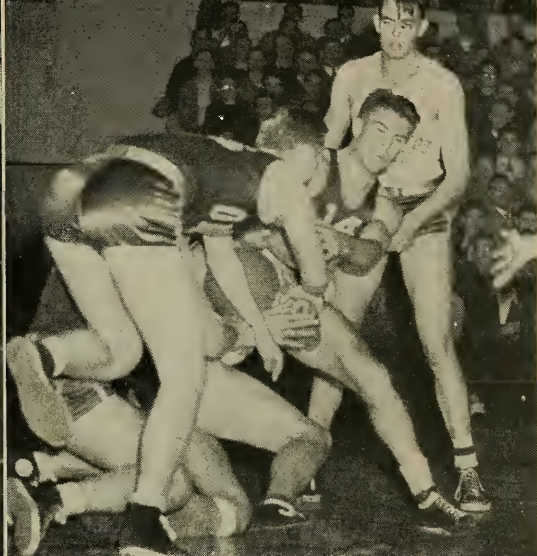


(See page 79)

THE PERSONAL FOUL. Oregon's All America John Dick is fouled from the rear by two California players in championship tussle.

(See page 128)

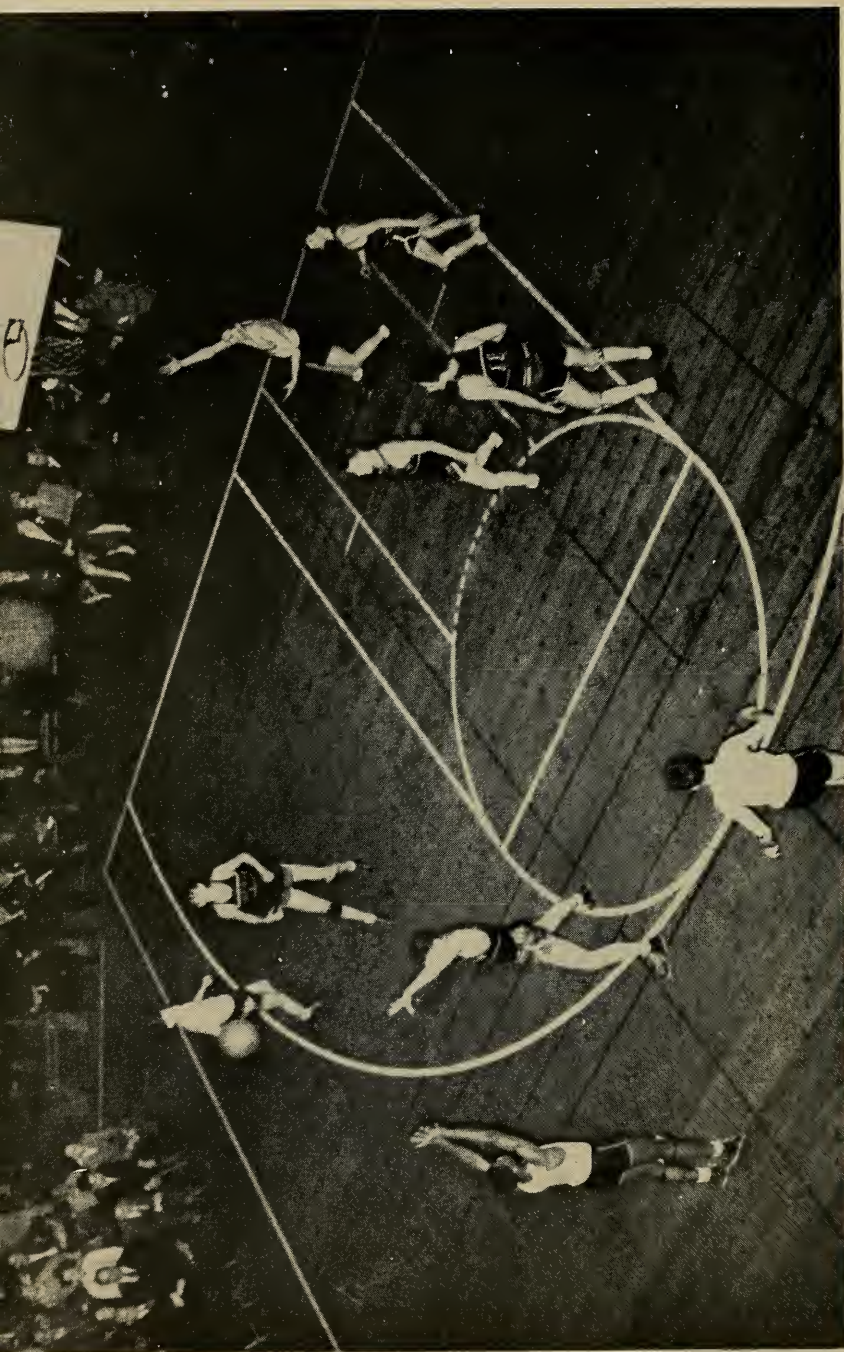
THE BASKETBALL OFFICIAL. It's a foul! Pat Kennedy, veteran New York official calls one in Madison Square Garden. *World Wide Photos.*



(See page 83)

THE HELD BALL. Nothing to do but call a held ball and let them jump for it in this scramble during the Oregon-Washington State game in the Pacific Coast Conference. *Photo courtesy Warren Teter.*





(See page 115)

THE FORDHAM-COLUMBIA EXPERIMENTAL GAME. Played in the Columbia gymnasium on February 7, 1945. Notice white markings dividing the court into two areas.

TABLE XXIII (Continued)

Season	Game	Original Score	Area Score
1944-45	Oklahoma A. & M.	49	34
	New York Univ.	45	34**
"	St. John's University	41	48
	Coll. of City of New York	42	51
"	Univ. of Tennessee	50	52
	New York University	48	40
"	Brooklyn College	49	54
	Western Kentucky	45	58*
"	New York University	41	38
	Oklahoma A. & M.	44	40
"	St. John's University	34	31
	New York University	30	31**
"	Brooklyn College	54	54
	Coll. of City of New York	57	51*
"	Columbia University	41	49
	Yale University	38	37
"	Bowling Green State Univ.	61	49
	New York University	63	49**
"	New York University	70	69
	Ohio State University	65	67
"	St. John's University	34	32
	Muhlenberg College	33	36*
"	Canisius College	58	52
	Long Island University	61	55
1945-46	Univ. of Oregon	57	42
	Univ. of Washington	56	55*
"	DePaul University	59	41
	Bowling Green State Univ.	54	42*
"	Univ. of Oregon	62	52
	Univ. of British Columbia	60	46
"	Univ. of Oregon	42	34
	Oregon State Coll.	41	35*
1946-47	Oregon State Coll.	56	50
	Univ. of Washington	52	51*

TABLE XXIII (Continued)

Season	Game	Original Score	Area Score
1946-47	Univ. of Oregon	46	41
	Washington State Coll.	48	38*
"	Univ. of Oregon	45	36
	Univ. of Idaho	43	37*
"	Univ. of Oregon	49	43
	Univ. of Washington	48	36
1947-48	Yale University	57	46
	Duquesne University	60	51
"	Fordham University	77	69
	Yale University	75	68
"	Yale University	56	48
	University of Pennsylvania	59	49
"	Yale University	54	50
	Cornell University	58	48*
"	Yale University	63	47
	Dartmouth College	68	57
"	Yale University	52	48
	Princeton University	53	36*
1948-49	Yale University	69	59
	St. Marys—California	74	71
"	Yale University	45	40
	Princeton University	47	40**
"	Yale University	54	49
	Columbia University	58	48*
"	Yale University	67	53
	University of Illinois	71	67

advantages of the tall man. While it may be difficult to have three scoring areas, it is suggested that this plan be tried by coaches and instructors in classes and practice sessions. If the plan proves too complicated, the court may be divided into two scoring areas. This plan was used in the Columbia-Fordham experimental game. The two-area plan may be used by allowing one point for goals scored in the short area and two

points for goals scored in the outer area, provided the short area does not extend beyond the free-throw line. If the areas are used as in the Fordham-Columbia experimental game, the goals in the short area should count two points and the goals in the outer area three points. These suggestions are based on percentages derived from the survey.

Major changes should never be made without sufficient evidence of their worth and this must come through research and experimentation. Many coaches and followers of basketball fought against the elimination of the center jump, and it took years to bring about this change. The Pacific Coast Conference finally tried the plan for one entire season and this resulted in the change. Now it is agreed that it is an improvement in the game.

If the tall man and the zone defense are problems in basketball, the plan suggested here may be the answer. It should certainly never be made illegal to use the tall man or the zone defense, but rules of the game may be altered to make it of less advantage to use them.

Again, none of the proposals in this Chapter are made with the idea of changing the rules immediately. Yet, the suggestion is made that coaches try out the proposals, experiment with area scoring and see if the results seem to be helpful to the game.

Chapter II

The Player Analyzes His Own Game

MOST PLAYERS MUST MAKE THEMSELVES GREAT BY CONSTANT practice. It is alleged that the great pianist Paderewski was once approached after a concert by an admirer who said: "That was wonderful. I wish I could play like that." The artist replied, "No, I'm afraid you wouldn't want to. It was necessary for me to practice twelve hours a day for thirteen years in order to play as I do."

A player who expects to be an outstanding performer in highly competitive basketball will find it necessary to make certain sacrifices. He must, of course, be willing to keep himself in good physical condition. This means that he must refrain from smoking and drinking alcoholic beverages. He must not have habits that are detrimental to the very best possible physical condition and endurance. In addition to having the physical requirements and a correct mental attitude, the player must be willing to put basketball first among all his activities, except for his studies, during the season.

Major sports are now so highly specialized that it is necessary for boys to do some practicing in their chosen sport out of season. It is the trend now for coaches to specialize. Many schools engage a different coach for each major sport and they frequently hold practice sessions during other than the regular playing season. To keep up with the highest competition, therefore, it is also necessary for players to specialize. The

varsity players. After a thirty-minute talk, a coach can tell whether or not they have a chance. If a player has reasonable ability, it depends largely on how much he wants to sacrifice and specialize to be a good competitive player.

Coaches may guide, counsel, and aid them but to get to the top, the players themselves must assume the major responsibility.

One way to practice constructively after techniques are learned is to scout or analyze one's own game. For example, in practice shooting keep a daily or weekly chart as illustrated in Form J, page 123. By recording the number of attempts and goals from various areas and for the various types of shots, a player soon learns his proficiency and how best to spend his time to improve.

If scout reports are kept in scrimmages and games, a player should be given access to the findings so that he may know his ability and achievement. He can then work accordingly to improve. Our charts are scrutinized carefully by players after scrimmages and games and great interest is shown by each player regarding his achievement. This means there will be an effort toward improvement in most cases.

At first, some players do not like to know about their shooting percentages and other records. Just as baseball players are conscious of their batting averages, so some basketball players feel that knowing their records makes them too conscious of the percentage factor and causes them to "tense up" in scrimmages or games. However, after becoming accustomed to the idea, all players seem to like it. Players must adjust themselves to it eventually because the basketball shooting averages are now public knowledge just as batting averages are in baseball.

It has been the author's custom to make up a season report on each player at the end of the year. An example of this is found in Form G, page 36. In light of these findings, suggestions are made to each player that he may use to improve

his game during the off-season and a prescribed program is outlined for him. After a season under this plan, players eagerly come into the office to receive their report each Spring. Of course, keeping proper records is basic to this plan.

Individual rating scales may be of great value to the player. An example is offered on Form K, page 126. Self-analysis and rating by the player is also strongly recommended. This brings his rating to the player in the most meaningful way and he may work accordingly. Coaches, of course, may also use these scales as an aid in the selection of squad and team and for instructional purposes. Often the player's rating and the coach's rating may be combined, with a conference resulting. A constructive plan for player improvement may follow.

It must constantly be kept in mind by the coach that each player is different. Practice sessions in which all players receive exactly the same type of instruction should be minimized. On the basis of the player's rating, a program should be prescribed that will fit his particular needs.

The rating scale offered in Form K is not claimed to be technically valid. The twenty-five factors are not weighed as to importance and everyone may not agree that these are the proper or total factors which make up the successful player. It does include, however, the generally accepted factors. By receiving a mark of four in each factor, a player could score one hundred on the rating. If a player's score falls below three in any factor, real effort should be made to improve this skill. It will be noted that it is impossible for the player to improve some of the factors listed. For example, a small player cannot help his size. This means he will need to work harder on the other points to make up for this handicap. A player can, however, improve on most factors, both objective and subjective. The data from this survey will aid the individual player in improving the objective factors by establishing standards that indicate good or bad performance.

Subjective factors may also be improved if the player will

SCALE	INDIVIDUAL OFFENSE	DEFENSIVE FOOTWORK	DRIBBLING	PASSING	WRIST ACTION	BALL HANDLING	BALL HAWKING	SHORT SHOTS	FOUL AREA SHOTS	LONG SHOTS	FREE THROWS	INDIVIDUAL OFFENSE	INDIVIDUAL DEFENSE	OFFENSIVE BACK-BOARD WORK	DEFENSIVE BACK-BOARD WORK	APPLICATION OF FUNDAMENTALS	SPEED ON COURT DRIVE	AGGRESSIVENESS	COMPETITIVE ABILITY UNDER FIRE	CONDITION TRAINING	MENTAL ATTITUDE	INTELLIGENCE	ALERTNESS	PROPER CUTTING & FLOOR PLAY	SIZE & BUILD	NATURAL ABILITY	TOTAL SCORE	INDIVIDUAL RATING ON SQUAD
1. VERY POOR	3	2	3	3	4	3	3	2	1	4	3	1	3	3	3	4	3	2	3	3	3	2	3	3	4	3	74	5
2. FAIR																												
3. ABOVE AVERAGE																												
4. EXCELLENT																												
NAME	Jones.																											

FORM K

Individual Player Rating Scale. From BASKETBALL ILLUSTRATED by Howard A. Hobson. Copyright, 1947, by A. S. Barnes and Company.

analyze himself carefully. For example, many players have developed skills to a high degree but because of a poor mental attitude, are unable to excel in competition. Worry about being "off one's game," consciousness of spectators, lack of confidence, the wrong attitude toward the coach or other players, fear of being taken out of the game for mistakes, and what people or the newspapers say, are only a few of the examples that keep players from performing to the best of their ability.

Players may get help in analyzing their game by asking teammates for their opinions about both the objective and subjective factors. The intelligent player is one who is willing to help his teammates and, in turn, to be helped by them.

Still another aid is the use of moving pictures. If a movie camera is available, pictures of players in action executing the various skills will be invaluable. Coaches will also find it valuable to take moving pictures of games when possible. There is no better aid in individual instruction than a picture that will show the player exactly how he performs.

Generally speaking, then, the successful player must (1) be willing to make any sacrifice that is necessary to be in fine physical condition, (2) have the proper mental attitude toward the game, (3) have determination and confidence that he can succeed, (4) constantly analyze his game by keeping careful records, (5) try to improve on the basis of these findings after consultation with the coach. He should also make it a habit to go into the coach's office often to talk things over. This is helpful to both player and coach.

Chapter 12

Scouting the Officials

(See photo, The Basketball Official,
in illustrated section.)

COACHES AND OTHER BASKETBALL AUTHORITIES AGREE that, because so much is left to the judgment of the official, basketball is the most difficult of all games to officiate. The records show that the average team commits fifteen to twenty personal fouls during a game. At least, the officials call that many. For both teams that makes a total of thirty to forty decisions on personal fouls alone. If we add to this violations, out-of-bounds decisions, held balls, and technical fouls it is reasonable to assume that basketball officials have at least seventy-five decisions to make during the progress of a forty-minute game. Each of these decisions may vitally affect the game and a team's chances to win. Basketball officials are usually part-time workers; officiating is a side-line for them. For this reason, comparatively few of them make a thorough study of the game. It therefore falls upon the coach, the only person spending the major portion of his time working at the game, to help in problems of officiating. Again, this book does not deal with playing or officiating techniques, but rather with facts derived from studying and analyzing the game, which may lead to improvement in all its phases.

There are certain significant results which should concern the official. It has been pointed out that the home team wins 63 percent of its games. This in itself is, of course, not the fault or concern of the official, except for the contributing factors. For example, personal fouls are called much more frequently on the visiting team than they are on the home

team. Even more serious is the fact that violations are called more frequently on the visiting team than on the home team. Many times, of course, this is proper and it is admitted that no two games, or even parts of games, are the same. However, the results in regard to these two factors are too consistent to be overlooked. Other data are available that show numerous instances where the same officials, working several games in which the same teams participated, called more fouls and violations on the visiting team than on the home team. Also, more players on visiting teams are put out of games on fouls than are members of home teams.

Indications are that there is a tendency for the official unconsciously to favor the home team. This is not because the official is dishonest or unethical; it is because he is under the same pressure that confronts a judge or jury trying a case in a community where local feelings and prejudices run high. This situation may partially be eliminated by engaging officials from an outside area who have no interests of any kind in the community where the game is played. It has also been suggested that officials be trained, recommended, and assigned by a neutral, central bureau representing the Conference or Association under whose auspices the teams are playing. Scouting the official is another way to help the officiating problem. If it is fair to measure the achievement of a basketball player during a game by analyzing his performance, why is it not equally fair to do the same to the official? Data gathered in this manner will soon point out which officials are inclined to work games without being influenced by local pressure, which ones yield to this pressure, and which ones do or do not have the general ability to officiate.

The suggested procedure is as follows: Assign an observer to each official through one entire game and chart the official on the number of personal fouls and violations that he calls on each team during the game. The results are then totaled for the entire game. If records of this kind are kept on every

DATE _____
 TEAM "A" (Visitors) _____ Score _____
 TEAM "B" (Home) _____ Score _____
 OFFICIALS "C" _____ "D" _____ PLACE _____

* * * * *

I. ANALYSIS OF OFFICIAL'S WORK: (In checking "Yes" or "No" column use either "C" or "D," or both.)

Satisfactory

A. Subjective

- | | |
|--|--------------|
| 1. Prompt Appearance for Game | Yes___ No___ |
| 2. Physical Condition | Yes___ No___ |
| 3. Professional Poise | Yes___ No___ |
| 4. Speed in Action | Yes___ No___ |
| 5. Prompt and Decisive Judgment | |
| Calling Plays | Yes___ No___ |
| 6. Judgment in General | Yes___ No___ |
| 7. Assumed Equal Responsibility | |
| Calling Plays | Yes___ No___ |
| 8. A Spirit of Comradeship rather than Hostility | Yes___ No___ |
| 9. Assumed Complete Command of Game | Yes___ No___ |
| 10. Official Combination and Team Work | Yes___ No___ |
| 11. 1947-8 Rule Interpretation Calls | Yes___ No___ |

B. Objective

- | | |
|---|-------|
| 1. Personal Fouls Called on Home Team | _____ |
| 2. Personal Fouls Called on Visiting Team | _____ |
| 3. Violations Called on Home Team | _____ |
| 4. Violations Called on Visiting Team | _____ |
| 5. Held Balls called on Both Teams | _____ |

REMARKS: (State briefly conditions which prompt you to check column "NO.")

II. CONDITIONS AND INTERPRETATIONS WHICH AROSE IN THIS GAME THAT CALL FOR SPECIAL ATTENTION FOR OUR NEXT MEETING:

Signature of Coach _____

Signature of Athletic Director _____

game that an official works throughout the season, some indication of his ability will be insured. The measurements for a large number of games, or a comparison of data on the same official working with the same teams playing at home and away, will be of some value.

In addition to objective data there should be subjective observations, and they must be made by an expert. The commissioner of officials usually does this in college conferences. If there is no commissioner, the officials' associations should send out men to scout officials. Subjective observations should include the appearance, physical condition, and professional poise of the official, his judgment and responsibility in calling plays, and his attitude toward players, spectators and coaches.

A composite report of all of the data should be recorded and sent in to the official's association or the commissioner's office, whichever may be the central bureau. This report may be sent in on a form similar to Form L, page 130. This particular form, with some modifications, has been used in the Pacific Coast Conference.

It is hoped that these suggestions on the scouting of officials will be of some help to the officials themselves and a means of improving the entire officiating problem.

Officials may also be aided through their commissioners. These men are appointed for conferences or leagues and should be qualified to observe, train, appoint and assign officials. Standard interpretations of rules will also be a great aid to the officials, particularly in intersectional play. Moving pictures of officials in action, as well as of rule interpretations will also be helpful. Clinics and demonstrations are still other possibilities which should be utilized. Lastly, bringing records kept during games to the official's attention, as we do in the case of players, will help him and will tend to eliminate the weaker officials. At best, basketball will always be a difficult game to officiate. Improvement depends on cooperation between officials, coaches, players, and spectators.

Officials have an opportunity to aid the game by their conduct on the court. Decisions should be made promptly and clearly, but the official who is an exhibitionist has no place in basketball. The game is for the players, and officials should stay in the background as much as possible. Also, their manner should not have a tendency to antagonize players or spectators. The official who knows the rules and their interpretations thoroughly, who is in the physical condition his duties require, and who has the professional dignity and poise to carry out his assignment efficiently but without showmanship, will do much to improve basketball. Coaches should make an effort to train young officials by using them during scrimmages. Officiating should also be included in physical education courses that include basketball.

Chapter 13

Box Score for Sportswriters— Improved Score Book

IT HAS ALREADY BEEN STATED THAT BASKETBALL IS PLAYED by some twenty million and watched by more than one hundred million people each year. This interest indicates that there must be a correspondingly large number of people who read about the games in the newspapers. Sportswriters and reporters, therefore, should seek to report as many interesting facts of the game as possible. In baseball, for example, the score of the game and the number of runs each player scores is not all that is reported to the public. A rather elaborate box score is included and it is followed by a summary giving most of the available facts about the game. Similar information is available in basketball, so why not follow the same procedure?

Admittedly, it would be too complicated for a reporter to record all of the details that are included in a scout report. However, a simplified record with the most important statistics could easily be kept in a score book similar to the one described in Form M on page 134.

It will be noticed that this model form includes all available information now kept in the ordinary score book. It adds to this field-goal attempts, recoveries, and losses-of-balls. From this information, individual player and team percentages and averages may easily be computed and recorded. In this manner, season records for players and teams may easily be kept the same as in baseball.

HOME TEAM _____] VS VISITING TEAM _____]
 DATE _____ PLACE _____ REFEREE _____ UMPIRE _____ TIMERS _____ FINAL SCORE []

SCORERS

FOULS	PLAYER	POS.	NO.	FIELD GOALS	FREE THROWS	RECOVERIES	LOSSES	TOTAL POINTS
0'10'20"	Nelson	F	8	1X11X1/11X1	1X1/X11X1	111/1111	111/11	9

EXPLANATION OF FORM M

This is an example of a page of a score book for one team. The heading at the top, the running score and times out entries at the bottom are self-explanatory. Explanation of the columns is as follows:

- Column 1—*Fouls*: P1—first personal foul
P2—second personal foul
- “ 2—*Player*: This indicates the player's name.
- “ 3—*Pos.*: *Position*
- “ 4—*No.*: Player's jersey number
- “ 5—*Field Goals*: This column includes field-goal attempts and field goals scored. A vertical line indicates a field-goal attempt and an X indicates a field goal scored.
- “ 6—*Free Throws*: This column includes free-throw attempts and free throws made. Again a free-throw attempt is a vertical line and an X is a free throw made.
- “ 7—*Recoveries*: Includes offensive and defensive rebounds, interceptions and retrieved jump balls. A vertical line indicates a recovery.
- “ 8—*Losses*: This column includes losses-of-ball by bad passes, violations, or poor ball handling. A vertical line indicates a loss.
- “ 9—*Total Points*: Total points are equal to the number of field goals made (2 points each) plus the number of successful free throws (1 point each).

Game totals are merely the addition of each column.

In the totals under “field goals” and “free throws” the first number indicates the attempts and the second number indicates the baskets made or scored; percentages are arrived at by dividing the number of baskets made or scored by the number of attempts.

Note: Diagonal line divides game into two halves. Everything on left of diagonal line is first half; everything on right of diagonal line is second half.

From the data accumulated in this type of score book, a box-score summary suitable for use in the newspapers could easily be made. An example is given in Form O on page 138. This

EXPLANATION OF FORM N

This summary, or box score, is, of course, taken from the score book. It gives a total for each player and for the team. The explanation of the columns is as follows:

Column 1—*Name of player*

- “ 2—*Fouls*: This includes the total number of personal fouls called on the player during the entire game. It also includes technical fouls which would be indicated by T¹, T², etc. in Form M.
- “ 3—*F.G.*: Field-goal attempts and field goals. For example, 10-3 means 10 field-goal attempts and 3 field goals.
- “ 4—*F.T.*: Free-throw attempts and goals. For example, 8-3 means 8 free-throw attempts and 3 free-throw goals.
- “ 5—*Rec.*: Total recoveries
- “ 6—*L.B.*: Total loss-of-ball
- “ 7—*T.P.*: Total points

The totals at the bottom are, of course, the team totals and again the percentages are arrived at by dividing the number of goals by the number of attempts.

many columns, a summary may be used at the bottom, as is done in baseball. This summary might include the personal fouls, and if necessary, the recoveries and losses, eliminating those columns from the box score proper.

This simplified plan is suggested as a start toward reporting the most essential game information. In some cases there may be a demand for more detailed information, as has been the case in baseball. It is possible that reporters who care to keep detailed statistics might include a summary of such things as offensive rebounds, defensive rebounds, violations, bad passes, ball-handling losses, interceptions, jump-ball recoveries, baskets responsible for, and assists. All but the latter two may be objectively recorded. A complete summary using abbreviations no more complicated or detailed than is commonly used in baseball would be possible. Again, it should be stressed

that this latter, more complicated plan is only necessary for those who desire complete information. As the public becomes more familiar with this type of reporting the demand for additional details will follow.

THE RUNNING SCORE

It will be noted in Form A on page 14 that the complete scout report includes an elaborate running score. This type of running score was not included in the improved score book, Form M on page 134, because it would be impossible for one person to keep this type along with all the other scoring records. However, the values of the complete running score are so great that it would be well to have one person devote his time to keeping it on a separate form. A very complete running score plan is given below to show the possibilities.

RUNNING SCORE																				
SCORE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PLAYER SCORING		11		11	9	11	7		9		7	11		6		7	11		11	
TIME OF SCORE		19½		18	17	16½	16		15¾		15	14½		14		12	11½		10	
TYPE OF SHOT LOCATION	1-L		2-L						3-C		3-C			1-R		1-R			1-L	

FORM O

Complete Running Score

SCORE Box: Draw a diagonal line through proper number each time score is made. This shows the exact score of both teams at all times during the game.

PLAYER SCORING Box: Place the jersey number of the player scoring the goal directly beneath the score number. This furnishes very valuable information since it shows which players are consistent and which ones have "cold" streaks. It also gives information for reporting the game so that players will be given proper credit for making important goals.

TIME OF SCORE Box: Starting with twenty minutes and going to zero, each time a goal is scored, place the *remaining time* to the nearest quarter minute directly under the score number. This provides extremely valuable information as to when a team or player has long

periods without scoring. This may involve a fatigue element. It also makes it possible to compare the exact scores of both teams at any time during the game. This is important information for sportswriters.

LOCATION—TYPE OF SHOT Box:

For location of shot:

- 1—short shot (cripple) out to twelve feet from basket.
- 2—foul area shot; from twelve to twenty-four feet from basket.
- 3—long shots; beyond twenty-four feet.

For type of shot:

- L—left-hand shot
- R—right-hand shot
- C—chest shot
- U—underhand shot
- H—hook shot
- O—overhead shot

Example—1-R would indicate short shot right hand.

The information in this box will aid coaches and sportswriters. It will give the type of shot and the location on the court from which each goal is made. This makes it possible to describe a game much more vividly and, of course, will aid coaches in instructional work.

SCORING RULES FOR BASKETBALL

Scoring rules for basketball should be as complete as they are in baseball. The following rules were drawn up by the author at the request of the National Collegiate Athletic Association with the assistance of Mr. Homer Cooke of the N.C.A.A. Bureau. The rules now have the approval of that bureau. The rules submitted have been used in the 460 game survey, although "assists" and "points-responsible-for" were not included. Some of the rules were given in Chapter 3 in describing scouting methods. The complete list is given here with approved rulings and recorders are urged to use them so that consistency and standardization may be achieved. Approved rulings are cases in point that are a part of all official rules.

SECTION 1—FIELD-GOAL ATTEMPTS:

Article 1: An attempt shall be charged to a player any time he shoots, throws or taps the ball at the basket, when, in the opinion of the scorer, he is attempting to score a goal, except when he is fouled in the act of shooting and the goal is *not* made.

Article 2: Tip ups shall count as field-goal attempts, because the player tips the ball with the intention of scoring a goal.

Article 3: Blocked shots shall count as field-goal attempts. The player whose shot is blocked is attempting to score a field goal.

Question: Team A Player, while shooting, is fouled by Team B Player and goal is made. Is this a field-goal attempt?

Answer: Yes. Since a goal was made, an attempt must be charged. If the goal was not made, no attempt would be charged.

Question: Team A Player shoots but fouls Team B Player by charging after the ball leaves his hands. Is this a field goal attempt?

Answer: Yes, as goal, if scored, would count in this case. If foul were called before ball left shooter's hands, ball would be dead before shot and no field-goal attempt would be charged.

SECTION 2—REBOUNDS:

Article 1: A rebound is credited to a player or team each time the ball is retrieved after a field-goal attempt or free-throw attempt is missed. A rebound must be credited following each unsuccessful goal attempt, except when ball is dead following free-throw attempts.

Article 2: A *team* rebound is credited to the *team* that the ball is awarded to when a goal attempt goes out-of-bounds (a) without being touched by a player (b) is deflected out-of-bounds before there is possession (c) a free-throw attempt misses the rim and is awarded by official to opponent out-of-bounds.

Question: Team A Player and Team B Player retrieve rebound simultaneously and held ball is called. Who is credited with rebound?

Answer: If neither player had clear possession prior to the held ball, credit player whose team retrieves the jump ball. For example, if Team A Player tips jump ball and it is retrieved by his team, credit Team A Player with the rebound.

Question: Team A Player does not catch rebound but tips it out to a teammate. Is he credited with a rebound?

Answer: Yes, if the ball goes to a member of Team A. However, if it goes to Team B Player, the latter is credited with the rebound.

SECTION 3—RECOVERIES (Other Than Goals or Rebounds):

Article 1: The ball changes from one team's possession to the opponent's in one of the following ways:

1. Following opponent's successful goals.
2. Defensive rebounds.
3. Interceptions.
4. Jump balls (when ball is retrieved by team not originally in possession).
5. Violations.
6. Offensive personal fouls.
7. Technical fouls on offensive team.
8. Declined free throws by the defensive team.
9. Double foul where original possessor loses following tip-off.

Goals and rebounds are covered elsewhere. Credit other recoveries in cases covered by the following articles.

Article 2: Interceptions:

An interception occurs each time a player or team takes the ball away from the opponent. Examples are intercepted pass; taking the ball from an opponent's hands; stealing the ball on a dribble.

Question: Team A Player has ball and Team B Player ties it up causing a held ball. Is this an interception?

Answer: Credit Team B Player with recovery *if* his team retrieves the jump ball. If not, there is no change of possession and no recovery is credited.

Question: Team A Player makes a bad pass that goes out-of-bounds and ball is awarded to Team B. Is this an interception?

Answer: Yes. Credit B with a *Team* recovery as the ball changed possession.

Article 3: Jump Balls:

A jump-ball recovery is credited each time the ball is tossed between two players and a player's team gains possession. This includes tip-offs. Credit the recovery to the player retrieving the ball.

Question: On a jump ball Player A taps the ball out of bounds and it is awarded to Team B. Is a recovery credited?

Answer: Yes. Credit a *Team* jump-ball recovery to Team B as that team gained possession.

Article 4: Fouls:

When ball changes possession due to an offensive foul or declined free throw, credit a recovery to the player who was fouled. In case of a technical foul by offense where no individual player is fouled,

credit a recovery to the *team* that is fouled. If double foul is called and jump-ball that follows causes a change in team possession, credit a recovery to *team* retrieving ball.

SECTION 4—LOSSES:

Article 1: A player or team loses the ball in one of the following ways:

1. Scoring a goal.
2. Losing a rebound to defensive team.
3. Bad pass or poor ball-handling resulting in interception by opponents.
4. Violations.
5. Allowing ball to be tied up and losing resulting jump ball.
6. Committing an offensive foul—personal or technical.

Goals and rebounds are covered elsewhere. Charge other losses each time a player or team is responsible for the opponent gaining possession of the ball. Such cases are:

Article 2: When a player in possession loses ball to opponents due to bad pass, poor ball-handling or dribbling, or due to a violation, charge the player or team with a loss.

Question: Team A Player has ball and withholds it from play or allows Team B Player to tie it up causing held ball. Is a loss charged?

Answer: If held ball results in possession by Team B, charge Team A Player with a loss. Otherwise no loss is charged as ball did not change possession.

Question: Team A Player is dribbling and Team B Player slaps ball out-of-bounds. Is Team B Player charged with a loss?

Answer: No. Team B Player did not have possession and ball did not change team possession. Had Team B Player caught the ball and then fumbled or slapped it out-of-bounds, he would be charged with a loss.

Article 3: Charge a loss each time an *offensive* player commits a personal or technical foul as this always involves loss of ball.

SECTION 5—ASSISTS:

Article 1: Credit a player with an assist each time he makes, in the scorer's judgment, the major contributing pass to a field goal. Further, only one assist is to be credited for each field goal and only when it is primarily responsible for that goal.

Question: Team A Player retrieves defensive rebound, dribbles to side and passes to teammate in mid-court. Latter could have scored but passes to another teammate who scores the goal. Who gets the assist?

Answer: Major contribution was probably made by first passer in this case. The last pass before goal is scored is usually but *not always* the assisting pass.

Question: When player scoring has dribbled in for the goal may an assist be credited to a teammate?

Answer: Yes. If there was an important pass that led to the dribble and goal, credit an assist to the passer.

SECTION 6—POINTS-RESPONSIBLE-FOR:

FORWARD

Careful judgement must be exercised by the scorer to be sure a defensive player is not unjustly charged with points an opponent scores. Even in assigned man-to-man defense it is necessary to change men due to screens or for other reasons. While it is desirable to place defensive responsibility for all points scored, individual players must not be penalized where there is serious doubt.

Article 1: Each time a point or points are scored, charge the opposing player or team with those points. If responsibility cannot be charged to an individual player, charge the points to the team.

In placing responsibility for field-goal scores, place the responsibility on the player who has or should have the responsibility at that particular time.

Free-throw scores are always charged to the player committing the foul.

Question: Player A goes in for offensive rebound and his opponent beats him back and scores field goal. Is Player A charged with the points?

Answer: No. If teammate took over his assignment as he should, the teammate would be responsible. If no one took over and if Player A had no reasonable chance to recover, charge responsibility to *Team*.

Question: Defensive Player A jumps at opponent and allows opponent to drive around him and score field goal. Teammate tries to take over but is too late. Who is responsible?

Answer: Charge Player A who made the major mistake in this case. Had Player A been unavoidably screened and teammate did not properly take over, the latter would have been responsible.

Question: Team A uses a zone defense. Can responsibility be charged to individual defensive players in this case?

Answer: Yes. Just as definitely as in man-to-man. Charge responsibility to player who is guarding or should be guarding shooter in that area. Also penalize zone defensive players who commit fundamental man to man defensive errors that lead to scores.

Errors are not included in the rules submitted. A suggested definition is: An error shall be charged to a player each time he commits:

1. A personal foul
2. A technical foul
3. A violation
4. Causes his team to lose the ball in any other manner than in a try for a goal.

Sportswriters are in agreement that a reasonable amount of this type of data will be helpful in writing interesting but impartial stories on the games.

As a case in point, there was a game in Madison Square Garden in which a certain highly publicized player scored twelve points, although the defense against him was very strong. Because of the twelve points most of the press reports were very flattering to the player. He accounted for the twelve points by scoring four free-throw goals and four field goals. The game chart showed that the player took thirty-two shots in order to get the four field goals, giving him an average of .125. Actually, his shooting performance was the poorest of any player on the court that night. Therefore the press report of this particular game was misleading—it did not tell the whole story. Many times the star rebounder, for example, receives little recognition because there is no evidence of his work.

The suggestions made in this chapter should help to eliminate guess work and give reporters and sportswriters more concrete information on which to base their stories.

Chapter 14

The Spectator—Watching the Game

HIGH SPEED AND FREQUENT SCORING PRODUCE THRILLS in basketball that are not found in many other games. However, partly because basketball is a comparatively new game, and partly because complete statistical reports have not always been available to the public, the average spectator has a limited knowledge of the sport. As a result, many who watch basketball games are unaware of many of the things that they should look for to make the game more interesting and meaningful to them.

Spectators watch a game for different reasons and therefore react differently during the game. Some watch because their school team is playing and they feel a responsibility to support the team; others watch a game because a friend or relative is playing on one of the teams; still others attend because they are interested in basketball as a sport. The last group probably includes many who have played the game. A fourth group includes those who are professionally interested, such as players, coaches and scouts.

Regardless of a spectator's purpose, the information and suggestions furnished in this chapter may in some measure give him a more intelligent understanding of the game.

Most coaches watch between one hundred and one hundred and fifty basketball games each season. In watching these games they look particularly for certain things, depending on their interest. If the coach's own team is playing, he of course attempts to analyze both individual and team play.

He knows the individual assignments and the plan that has been outlined for the team and his main interests are whether these are being carried out, and whether they are successful against the opponent. Many coaches follow an individual player constantly through several minutes of the game to see how he is performing. In other words, coaches analyze all phases of the game when their team is playing.

In watching a game where future opponents are playing, a scout's analysis, as described in the earlier chapters, should be the observer's intention.

Many times, coaches of college or professional teams watch games for the purpose of scouting new material. In these games there is a different interest. Here the coach looks for potential ability such as speed, aggressiveness, competitive ability, coordination, skill, size, and similar attributes. These observers are not greatly interested in analyzing team play and individual assignments.

It has been observed that when watching the game for one of these professional purposes there is seldom reason for, or evidence of, the observer screaming, screeching, and shouting as the game progresses. When a person allows himself to be "taken away" by the game and becomes a rooter, he ceases to be an analytical coach or scout.

Players often watch games in order to learn and to improve their own techniques. In such cases they are seldom strong rooters. Players analyze the game with a concentration and interest similar to those of a coach or scout.

The average spectator is not expected to watch a basketball game with the sole purpose of making a complete analysis of it. For this reason, he cannot be expected to react quite like an experienced scout, coach, or player. The point should be made, however, that the greater the spectator's knowledge of the game, the more intelligently he will be able to watch it and control his reactions. It is not our intention to discourage or take away the spectator's joy in rooting for their fa-

vorite team. It is desirable, however, that spectators be able to control themselves properly at the games and a greater understanding of the game will aid in this.

The observations made at a high school tournament will illustrate this point. Two very prejudiced rooting sections, one on each side of the court, comprised most of the attendance. It was obvious that the majority of the rooters had very little knowledge and understanding of the game. Their interest, of course, was to see their favorite team win. Constant bedlam and uproar started with the first whistle and lasted throughout the game. As a result, the players received undue and unjust criticism. Coaches were also criticized and in the spectators' opinion the officials were seldom right because each decision had to go against one team or the other. At times, spectators of this type reach a stage of hysteria which is undesirable for all concerned. Of course, there were a few spectators who apparently went merely to see the "spectacle" and sat passively, waiting for the end. They are comparable to the lady who courteously accompanied her baseball-minded husband to a game. She sat quietly through seven innings. Then the pitcher beamed the batter, at which point, rejoicingly, the lady jumped to her feet, exclaiming, "Good, now let's go home; he's hit him at last."

Greater knowledge will lessen the nervous strain, anxiety, and superstitions often apparent in the rooters' sections during ball games. Spectators should know what to expect from players, teams, and officials so that they will not hope for the impossible.

In baseball many spectators keep the score during the progress of the game. Since basketball programs are now used extensively, they should include an arrangement for keeping the score as illustrated in Form P on page 148. This might well include an individual chart, see Form E, page 30. This would make it possible to chart the performances of your favorite player during the game. The same form could be used

NAME	NO.	POS.	AGE	HT.	WT.	FIELD GOALS	FREE THROWS	PER. FOULS	TOTAL POINTS
* Hauptfuhrer, G.F.	17	F	21	6'4"	190				
* Rockwell, J.R.	16	F	19	6'3"	185				
* Prior, W	18	C	20	6'5"	195				
* Gannon, J.	11	G	25	5'11"	185				
* Brady, W	12	G	25	5'10"	175				
Crosby, C	7	F	19	6'	155				
Henry, W	14	F	22	6'1"	183				
McCurdy, W.	9	F	21	6'	170				
Guthrie, J	5	C		6'5"	210				
Mobraaten, N.	3	F	18	6'1"	178				

FIRST HALF SCORE

FINAL SCORE

NAME	NO.	POS.	AGE	HT	WT.	FIELD GOALS	FREE THROWS	PER. FOULS	TOTAL POINTS
* Lavelli, J	8	F	19	6'3"	185				
* Anderson, J.F.	11	F	19	6'2"	170				
* Joyce, R	9	C	20	6'5"	194				
* Redden, J.	6	G	20	5'9"	163				
* Peacock, S	7	G	20	5'10"	170				
Osbourne, J	5	G	19	6'2"	185				
Nadherny, J.	14	F	20	6'	193				
Jackson, L	15	G	21	5'10"	190				
Johnson, C.	4	C	21	6'4"	180				
Upjohn, H.	10	F	18	5'11"	160				

FIRST HALF SCORE

FINAL SCORE

* INDICATES PROBABLE STARTING PLAYER
 USE VERTICAL LINE FOR FIELD-GOAL ATTEMPT
 USE X FOR FIELD GOAL SCORED

USE O FOR FREE-THROW ATTEMPT
 USE ⊗ FOR FREE THROW SCORED
 USE P1, P2 ETC. FOR PERSONAL FOUL

FORM P

Basketball Program for Spectators

to chart an entire team, if so desired. Plans of this kind will develop a more meaningful spectator interest.

Teachers of basketball could greatly aid spectators by giving clinics, talks, and demonstrations of various kinds for the general public. These sessions might include such things as interpretations of the rules, demonstrations of fundamentals, simple plays, and moving pictures.

Demonstrations conducted in connection with early season games are possible. Talks and showing of basketball films to student bodies, service clubs, alumni groups, and other similar gatherings, may be very valuable.

Teachers of physical education courses that include basketball might well devote part of the course to spectator interest.

Spectators, of course, can also improve their knowledge of the game by reading the rules book and some of the many books on the sport (see Chapter 21 for list of suggested readings).

Chapter 15

Conclusions and Interpretations on Scouting

THE FOLLOWING LIST OF CONCLUSIONS AND INTERPRETATIONS should be of help to coaches, players, officials, sports-writers, and spectators, in accordance with their respective interests and needs.

1. Scoring in college basketball is on the increase. The present average is approximately fifty-five points per game. It was thirty-five points per game in 1937.

2. Shooting may be measured objectively and averages computed.

* 3. The shooting average for a basketball player in college games is approximately .271 or 27 percent. These averages show an improvement since 1946 but the peak has probably not been reached.

4. Shooting accuracy lessens as the distance of the shot becomes greater.

* 5. Over one-half of the scoring in basketball is done in the short area (within a radius of twelve feet from the basket). The shooting average in this area is .372. This has defensive implications for the coach.

* 6. Results of shooting in the medium area (between a radius of twelve and twenty-four feet from the basket) indi-

* Sections indicated by asterisks are based on averages over a thirteen-year period. Trends in recent years may change this figure. Regarding most factors the reader is urged to consult carefully all tables, from which figures may be taken for any period within the thirteen-year span.

cate that poor shots are taken in this area. The average is only .222.

* 7. In the long area (beyond a radius of twenty-four feet from the basket) shooting has been neglected and should receive particular attention. Only 16 percent of the scoring is done in this area. The shooting average is only .199.

* 8. The average team takes sixty-six shots at the basket each game and makes eighteen.

9. One-hand and two-hand shots are equally effective in the medium area but the two-hand shot is preferable in the long area.

* 10. Free-throw averages drop from .780 in practice to .592 in games. This might easily be improved by minimizing the mental and fatigue hazards.

11. The underhand style of free throw is the most accurate for most players. However, some of the top free throwers use other styles.

* 12. The average team has 17.6 free-throw attempts during the game and makes 10.4.

* 13. The home team has a distinct advantage. Home teams win 63 percent of their games. This is due mainly to a better shooting average and fewer losses-of-ball. Since other factors are nearly the same it would seem that psychological elements are involved.

* 14. The winning team has a slight advantage over the losing team in most phases of the game. However, the difference is due mainly to the fact that the winning team has a shooting average of .306 as compared to an average of only .235 for the loser. The winning team also shoots more frequently and better in the short area and is more accurate from the free-throw line. Generally speaking, shooting accuracy can be said to be the main difference between winning and losing teams, since there is very little difference in the number of attempts.

15. The average team is actually stronger in the second

half in field-goal shooting and in retaining possession of the ball. This indicates that the game is not too strenuous physically. Tension of players in the first half may lessen the advisability of pre-game "pep talks." Poor shooting in the first half may be improved by longer warm-up periods. The fact that free-throw accuracy lessens in the second half would seem to be due largely to psychological factors.

16. Shooting accuracy lessens as the competition becomes more intense. Therefore, all that can be done to relieve tension should be attempted.

* 17. There are at least 105 rebounds in the average college game and next to shooting rebound recoveries are the most important fundamental. The number of rebounds may be accurately measured during a game and it is valuable to the coach to know where the rebound strength lies.

18. Possession of the ball is worth an average of at least one-half point.

19. Loss-of-ball costs a team an average of one point and may cost as much as eight points.

* 20. Jump balls are relatively few during a game. The average is about fifteen. Less time should be spent on this phase of the game than on more important ones such as rebounding, shooting, etc.

21. The penalty for the personal foul is not severe enough. A single free throw is worth only one-tenth of one point net gain to a team. The penalty should be so severe that the player cannot afford to commit a foul. The survey indicates that 2 points should be allowed for the free throw.

22. The tall man (over six feet four inches) does most of his scoring close to the basket. Ninety-four percent of his scoring is within a radius of twenty-four feet of the basket. Enlarging the three-second area and allowing fewer points for short shots would tend to lessen the value of the tall man unless he can play all of the game well. Experimentation and further research is suggested.

23. An area-method of scoring is recommended for further study since it is more difficult to score from the longer areas. This would also help solve the tall man problem and the zone defense problem, and would encourage the teaching and use of the long shot. It also would add to spectator appeal.

24. Objective scouting may be done by a trained observer but subjective scouting must be done by a basketball expert. Many factors in basketball cannot be objectively measured. Subjective findings are equally important and should be considered as such by the coach.

25. Complete scout records on players, teams, and opponents should be kept each season for future reference. These may be obtained from game scout reports.

26. Officials tend to favor the home team in calling personal fouls and violations. Scouting the official is recommended as a means of improving the situation.

27. An improved score book and box score is suggested for the use of sportswriters so that they may better report the games to the public.

28. Players may analyze and improve their game through the use of fundamental rating charts.

29. It is possible for spectators to scout their favorite players during a game. Greater knowledge may lessen nervous strain and anxiety for the spectator.

30. There is a need for further research in the field of basketball, particularly on the secondary school level.

PART II

Foreword

THE MATERIAL CONTAINED IN THE FOLLOWING CHAPTERS is a brief summary either in outline form or in description of the coaching and teaching material contained in my book *BASKETBALL ILLUSTRATED* published by A. S. Barnes and Company.

Part II of this book is intended as a check list for the basketball coach. It includes a complete outline of the game which is divided into three parts, namely (1) individual and group fundamentals, (2) team offense and defense, (3) miscellaneous problems and duties of the basketball coach. The outline is taken from the author's coaching experience and his basketball coaching courses. It is hoped that checking over the various items in this outline at the beginning of and during the season will prove helpful.

An effort will be made to elaborate upon points covered in the second and third parts of the outline. Separate chapters are offered on (1) Fast-Break Basketball, (2) The Zone Defense and Attacks Against It, (3) Better Defense, and (4) Basketball Material and How to Use It. Particular attention is given to basketball strategy. Part II contains 19 diagrams of offensive plays, including jump-ball, out-of-bounds and fast-break plays as well as plays for attacking both zone and man-to-man defense.

Chapter 16

The Game of Basketball

PART I—INDIVIDUAL AND GROUP FUNDAMENTALS *

THE IMPORTANCE OF FUNDAMENTALS CANNOT BE OVER-emphasized. All successful teams, over a period of years, are well-grounded in all fundamentals. While time spent on this phase of the game varies with the experience of the squad, a minimum of from three weeks to one month of daily practice is usually required before team situations are started. After that time, constant review and proper application of fundamentals are necessary. The fundamentals should be taught in proper sequence so that one leads to the next. Drills to practice and review fundamentals should be used. Fundamentals and drills should be taught in a manner that fits into the style of play to be used.

A. INDIVIDUAL FUNDAMENTALS

1. *Footwork*

- a. Starts and stops
- b. The rear pivot, with feet parallel, with right or left foot advanced
- c. The front pivot
- d. Side and reverse turns

* The outline material which follows is from *BASKETBALL ILLUSTRATED* by Howard A. Hobson, Copyright, 1947, by A. S. Barnes and Company, Incorporated; used by permission.

- e. Defensive footwork:
 - (1) Proper stance, position of body, and other techniques
 - (2) Proper method of shifting forward, backward, and to the sides
- f. Jumping and landing (the take-off, various turns in the air and other techniques)
- g. Appropriate footwork drills

2. *Dribbling*

- a. Bouncing the ball while standing still, proper use of wrists and fingers
- b. The low running dribble used around defense
- c. The high dribble for speed
- d. The right- and left-hand dribble
- e. The change-of-pace dribble
- f. Dribbling drills
- g. Drills that combine dribbling and footwork

3. *Passing and Catching*

- a. Two-hand chest pass
- b. Right- and left-hand chest pass
- c. One- and two-hand bounce pass
- d. Right- and left-hand roll pass from various positions
- e. One-hand baseball pass
- f. Catching the ball, receiving different types of passes
- g. Passing and catching drills
- h. Drills that combine footwork, dribbling, passing, and catching

4. *Tipping and Retrieving*

- a. Jumping and tipping with right and left hands to all positions
- b. Retrieving tip-offs in various positions, proper timing, position of body

- c. Tipping of rebounds:
 - (1) Into basket
 - (2) Out to teammates
- d. Retrieving rebounds (proper timing, position of body)
- e. Retrieving loose balls in floor play
- f. Appropriate drills

5. *Shooting*

- a. Short shots—first area (within radius of twelve feet of the basket)
 - (1) Right- and left-hand lay-in shots from both sides.
 - (2) Over-the-rim shots from the center and sides.
 - (3) Pivot shots from all positions with right and left hands.
- b. Medium shots—middle area (radius of twelve to twenty-four feet from basket)
 - (1) One-hand push shots, both right and left, stationary and in motion.
 - (2) Pivot shot, right and left
 - (3) Two-hand set shots
- c. Long shots—third area (beyond a radius of twenty-four feet from basket)
 - (1) Two-hand chest shot
- d. Shots peculiar to individuals
 - (1) Hook shot, overhead shot, underhand shot
- e. The free throw
 - (1) The underhand toss, the chest shot, the one-hand shot
- f. Shooting drills
- g. Drills that review previous fundamentals covered, plus shooting

6. *Individual offense and defense*

(Taught together from various positions on court—includes pivot play)

- a. Individual defense
 - (1) Proper stance; position of body, arms and hands; voice; proper angle.
- b. Individual offense
 - (1) Fakes
 - (2) Watching defensive weaknesses
 - (3) Watching opponent's eyes
 - (4) Cutting, change of pace
- c. Drills covering individual offense and defense

B. GROUP FUNDAMENTALS (*TWO, THREE, OR FOUR ON A SIDE*)

The group fundamentals should be taught in the manner in which they are to be used in the system of play.

- 1. *Two against one* (offense and defense)
- 2. *Three against two* (offense and defense)
- 3. *Three-man fast break weave* (length of court)
- 4. *Four-man weave* (one end of court)
- 5. *Offense and defense of screens*
 - a. Stationary screens, screens approaching from the rear, both sides and front; inside and outside screens
 - b. Moving screens from all directions. Defensive methods of going through, crashing through, changing men
 - c. The post play with two men on each side (offense and defense)
 - d. The cutaway, roll and double roll, two men on each side (offense and defense)
 - e. The reverse, two men on each side (offense and defense)
- 6. *Competitive Rebound Work* (offense and defense) Two, three, and four men on each side
- 7. *Competitive Tip-Off and Retrieving Work* (offense and defense) Two, three, and four men on each side

All group fundamental work should be competitive when possible. Players who are to play together later should prac-

tice together on group fundamentals whenever possible. The coach should be watching for possible team combinations during this instructional period.

PART II—OFFENSIVE AND DEFENSIVE TEAM PLAYS

A. OFFENSIVE TEAM PLAYS

1. *The fast break*

Chapter 17 covers the fast break thoroughly. For this reason, it will only be mentioned here. It is hoped that all basketball coaches will consider the fast break as a basic part of team offense.

2. *Attack against a set man-to-man defense*

A good offense must, of course, have an attack against a man-to-man defense after the defense is set or organized. Many systems and plays are possible and an entire book could easily be written on plays of this kind. A number of plays against man-to-man defense are offered in Chapter 20 on *Material and How to Use It*.

It is easier for a coach to build an offensive plan of this kind than it is to copy one. The plan must depend upon the material at hand and the type of opponents that are to be met. Generally speaking, a man-to-man defense may be successfully attacked by

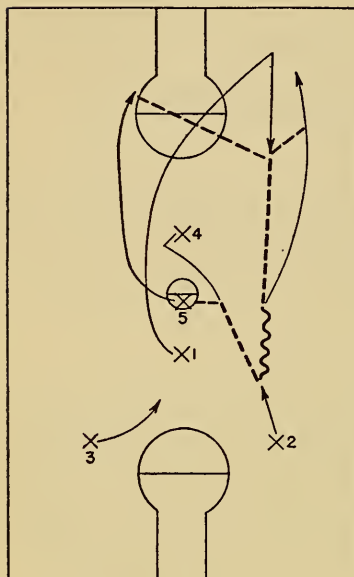
- a. keeping the players moving rapidly,
- b. screening plays of various kinds, and
- c. cutting plays of various kinds.

The single pivot, the double pivot, the give-and-go, the figure 8, and many other systems or combinations are possible.

In building an offense of this kind, the following pointers should be remembered: (1) it is harder to watch a player that is in motion than it is to watch one standing still—keep players moving; (2) it is harder to watch the ball when it is moving.

DIAGRAM I

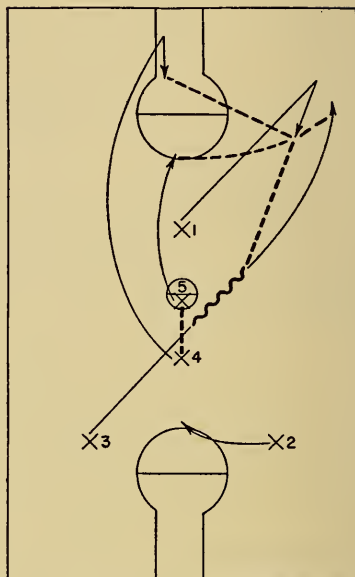
Tip-Off or Jump Ball
Play No. 1



1 leaves early. Ball tipped to 4 on side who taps ball back to 2. 2 dribbles up and passes to 1 who passes to 5 on opposite side or back to 2. 3 and 4 are safety. Same play either side.

DIAGRAM II

Tip-Off or Jump Ball
Play No. 2



Tip back to 3 who passes to 1 who meets ball. 1 may pass to 4, 5 or back to 3. No. 4 and No. 1 should vacate spots as ball is tossed. No. 2 is safety. Same play either side. 5 cuts for basket on opposite side.

KEY TO ALL DIAGRAMS

- X = OFFENSIVE PLAYER
- O = DEFENSIVE PLAYER
- = PASS
- ~~~~~ = DRIBBLE
- > = PATH OF PLAYER
- | = SCREEN

Keep the ball moving as much as possible; (3) do not congest the key-hole area: have only one player at a time cut in for the basket; (4) use combinations of players that will give strength to your offense; some offenses are built around only two or three players; utilize an offensive threat by each player, but concentrate on the top offensive men, and develop combinations with them as much as possible. (5) Find out the defensive weaknesses and run at them.

3. *Attack against a zone defense*

It is equally important to have an offense ready to attack a zone defense that is set or organized. This is adequately covered in Chapter 18, *The Zone Defense and How to Attack It*.

4. *Offensive tip-offs and jump-ball plays*

It has been pointed out in earlier chapters that including tip-offs there are only about fifteen jump balls in an average game. Therefore, one should not spend too much time on plays of this type. We should, however, emphasize organization that stresses possession of the ball in jump-ball and tip-off situations. Offensive plays or organization should, of course, be used when a team is reasonably sure of the tip; in other words, when the jumper has an advantage in height. Diagrams I and II on page 162, give examples of jump-ball or tip-off offensive plays or organization.

5. *Offensive rebound organization*

The importance of possession of the ball has been stressed throughout this book. It has also been pointed out that more than one hundred times in every game, a player has a chance to get a free ball by retrieving a rebound. Proper team organization will put players in position to get those rebounds. Rebound team organization should be a part of every fast break and every set play against any type of defense. In fact,

any time a shot is taken at the basket, there should be offensive team organization. Every effort should be made to get the best rebounders in the most advantageous positions. Sometimes, screening or cross-screening is a good plan. Whether a team can afford to offensively rebound two, three, four, or five players depends on the personnel and also on the other team's offensive. If the opponents are fast breaking, it may not be possible to rebound more than two or three men offensively. It is a good rule, however, to have as many players as possible on the offensive boards depending on the situation. Assignments must be definite for each of the five players.

6. *Offensive out-of-bounds plays*

There should be team organization every time a team has possession of the ball out-of-bounds. Players on the offensive team should have the feeling that, *the ball is ours—let's keep it until we get a good shot at the basket*. It must be kept in mind that the offensive team will have the ball out-of-bounds under their opponent's basket each time a goal is scored. This may be as many as forty times in a single game. Even in these situations, there should be organization in getting the ball into scoring position, even though definite plays are not used. If the team has the ball on the side of the court or under their own basket, plays may be utilized. In any event, an offensive team should keep the following suggestions in mind when they have a ball out-of-bounds:

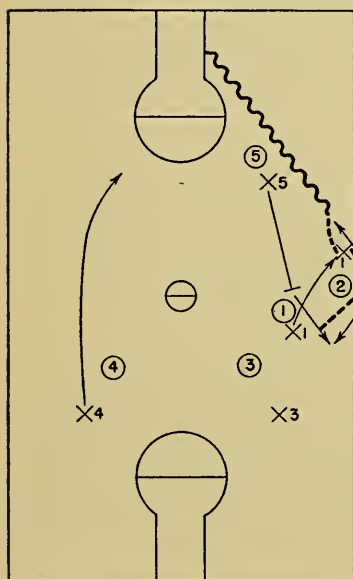
- (a) Have a five-man team organization to get the ball into scoring position.
- (b) Be sure that players are assigned to meet the ball. Remember, the defense may press.
- (c) Get the ball started quickly if a fast break is to be used.
- (d) Use long passes against a defense that presses or loafs back on defense.
- (e) Use scoring plays in out-of-bound situations under

your basket or on the sides of the court when the defense is pressing.

Diagrams III and IV illustrate out-of-bounds plays that have been successful against a pressing defense.

DIAGRAM III

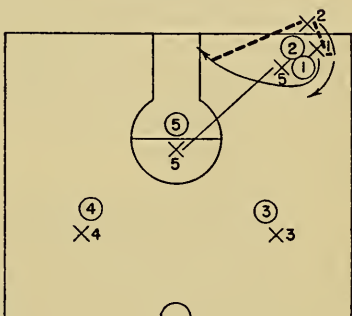
*Out-of-Bounds Play
on the side of court*



X5 screens ① and X2 passes to X1 who screens ②. X1 returns ball to X2 who dribbles in for score. If not open, X2 passes to X5 and cuts around X5. X4 cuts in on opposite side. X3 is safety. Same play either side.

DIAGRAM IV

*Out-of-Bounds Play
under Basket*



X1 takes position as indicated. X5 screens ①. X2 passes to X1 and may receive return pass from X1 and take set shot or X1 may cut around X5 and receive pass from X2 to rove. X3 and X4 are safety. Same play either side.

7. *Offensive free-throw organization*

Every time a team has an offensive free throw, every man on the team should have a definite assignment. The shooter, however, should not be given an assignment that in any way interferes with his concentration on the free throw. Making the goal should be his assignment. It is best, usually, to have two men back as defensive safety men since most of the free-throw attempts are successful and the other team may fast break. However, it is the only situation in the game where the offensive team has an equal chance at rebounding with the defensive team. This is due to the assignments in the lanes, which are equal for both teams. Of course, the two strongest rebounders should be placed in the best positions on the lanes. A third rebounder may be used if the other team does not employ a fast break.

It is necessary that every basketball team have offensive plays or team organization in each one of the above categories. It is further necessary that each player on the team have a definite assignment in each of these situations.

B. DEFENSIVE TEAM PLAYS

While we do not think of team defensive plays as we do regular offensive plays, defense does require *teamwork of the highest order*. Much of the material on team defense is covered in Chapter 19, *Better Defense*. Therefore, only the actual points will be included here in outline form, with brief comments.

Every player must have a definite assignment in team defensive organization when the other team has the ball. This applies to all situations.

Team defense consists of the following parts:

Getting back on defense

Particularly against a team that fast breaks, a defense must be organized and waiting for the attack.

Assigned man-to-man defense

Every team must apply this type of defense at some time during the season. Good man-to-man fundamentals are a must.

Variations of the assigned man-to-man defense

- a. Pressing defense all over the court, necessary at times for all teams, particularly when behind.
- b. Switching man-to-man defense or a quick-change plan. Useful against a good screening team.

*The zone defense—(See also Chapter 17—The Zone and How To Attack It)**Variations of the zone defense*

- a. The 3-2 zone; the 2-1-2 zone; the 2-3 zone.
- b. Combination defense. (Man-to-man and zone.)

Zone and combination defenses are not essential for all teams. However, a team that can play more than one type of defense has an advantage. Players should at least understand different styles of defense. The minimum essentials would include the man-to-man defense, the pressing defense, the switching defense, and taking over properly on defense. "Taking over" means helping a player who cannot stay with his man for some reason. It is an important part of defense.

Defensive organization on tip-off and jump-ball situations

- a. Man-to-man plan. This is perhaps the oldest and most simple defensive plan in situations of this type. Each player is assigned to an opponent. He must keep between his man and the ball and play him as he would man-to-man defense.
- b. Rotation plan. This plan places three players in a triangle around the jumpers. They may rotate to the right

or to the left. Each one is responsible for a territory. The fourth man plays back as safety. This is a good plan to use if good "ball hawks" are available.

Team defensive rebound organization

Ordinarily, every player on the defensive team should have an assignment when their opponents shoot at the basket. Occasionally, an offensive team will want to use a "sleeper" to go down quick on the fast break. However, in most cases all have assignments for defensive rebounding. There should be a greater advantage to the defensive team in this department because they have the inside positions. Again, it is necessary to have organization that places the strongest rebounders in ideal positions. The slogan here should be, "They had one shot, that's all—now get that ball!"

Team defensive out-of-bounds organization

This type of organization varies under different situations and in different areas of the court. Suggestions are as follows:

1. Under the opponent's basket, watch for screens. Avoid using a man to cover the player taking the ball out. Instead, assign that man to help other defensive players or use him as a "ball hawk," to intercept.
2. Under your basket, press a team that uses only one man to throw the ball to. Drop off of the man throwing in and double up on the receiver.
3. Be sure that each player has an assignment.

Defensive free throw organization

When their opponents are shooting a free throw, the defensive team should have the following things in mind.

- (1) Be sure to retrieve the rebound if the free throw is missed. The defensive team gets a rebound advantage by using a fast-break threat. This will cause the other team to have two safety men back and gives the defensive team three men against two on the boards.

- (2) If the opponents score the free throw, look out for a press by opponents. Have men come to meet ball.
- (3) Again, every man must have an assignment.

This concludes the first two major parts of the outline. It is suggested that teams spend three to four weeks on the fundamentals outlined in Part I. Another similar period should be devoted to team plays and organization. This entire program should precede practice games and game scrimmages. Otherwise, players will form bad habits and will not learn the system desired. Plenty of competition can be worked into the program in teaching the fundamentals and team organization.

PART III—MISCELLANEOUS PROBLEMS AND DUTIES OF THE BASKETBALL COACH

1. BASKETBALL MATERIAL—HOW TO DEVELOP IT, HOW TO USE IT

This subject is completely covered in Chapter 20, *Basketball Material and How to Use It*.

2. SELECTION OF THE SQUAD AND TEAM

Once the material reports for basketball practice, the job of selecting the squad and the team confronts the coach. This is a major problem. Decisions made by the coach may mean the difference between a championship and a losing season. First, let us consider the various methods of selecting the squad. It has been my experience that two methods are possible, depending on the situation.

First, assume that you have a large turnout and a short time, perhaps six weeks, in which to prepare for the season. My first experience along this line was at a large high school in Portland, Oregon. We had a turnout of two hundred and

sixty boys. Two weeks later, we had 25 and in three weeks, it was down to fifteen—the ideal number to carry on a squad. Naturally, this was not achieved by putting the entire 260 boys through a three or four week fundamental program. The plan was to require each candidate to perform a very simple fundamental exercise, such as dribbling the ball the length of the court and shooting for the basket. It was thus possible to eliminate many who were poorly coordinated, too small, or that had other handicaps that made it impossible for them to make the team that particular year. Next, the boys retained participated in five-minute scrimmages to determine their general ability and action on the court. From this procedure, it was possible to decrease the number to approximately twenty-five. With this number, we started the regular, fundamental program. Each period, however, ended with five-minute scrimmages to further thin down the squad. These scrimmages, of course, are not to be confused with regular game scrimmages, which came much later in the program.

The men who were not retained in the first fifteen were advised to turn out for intramural basketball and an intramural league was arranged for them. In this way, if someone was missed, it would come to light during the season. Those who gained experience and maturity, and showed improvement, were given another chance the following year.

In a situation where the turnout is small (not over thirty to forty), it is possible to select the squad in a different way. With this number, a coach may start in with the regular fundamental program and thin the squad down as he goes along. Short five-minute scrimmages may also be utilized.

When considering the size of the squad, coaches should remember that it is almost impossible to work with more than fifteen boys. Most gymnasiums do not have more than six baskets and many do not have that number. For adequate shooting practice and other fundamental practice, no more

than two or three players should work at one basket. In arranging intra-squad scrimmages, it is hard to give the conditioning work and the necessary practice if more than fifteen are included.

The fifteen men, of course, must have the proper qualifications that the coach desires. A combination of size and speed is usually desirable. Therefore, look for big men for the center and forward positions and fast men for the guard positions. When it can be combined with size, speed is, of course, an asset in all positions. The ideal fifteen-man squad includes three tall men for the center position, at least four tall men for the forward positions with six desirable, and six fast men for the guard positions. Naturally, attitude, competitive qualities and basketball ability, must also be considered in the selection of the fifteen-man squad.

Following the selection of the squad, the next important problem facing the coach is to *select the team*. It cannot be overemphasized that *basketball is a team game*. Coaches who never decide on a combination for their first team will not win many games. A five-man team should be selected as early as possible and kept together throughout the early part of the season. They must get used to working together; they must eat, sleep, and play the game together. Most great teams are of this type and there are very few successful teams in which the lineups are changed frequently. Adequate reserves are necessary but should be kept to a minimum. A good first five with an alternate forward, an alternate guard, and an alternate center can take care of most situations. The rest of the squad should be groomed for reserve duty in case of injuries or illnesses. They should also have an excellent attitude and be able to crowd the first string men all along the line. Preferably, the reserves should be underclassmen on their way up. It is easier for them to keep up interest and to maintain the desired morale.

3. THE BASKETBALL RULES

A coach is negligent in his duties if he does not thoroughly know both the rules and their proper interpretations. He must also be able and willing to *teach* the players these rules and their interpretations. Part of this may be done on the court in connection with regular practice, but the coach should also stress the necessity of owning a rule book and reading it. Periodic examinations may be given to advantage. Never forget that games are lost every year because a player or a coach does not know the rules. Players also need to know the rules and their interpretations to execute the fundamentals and play the game well.

4. BASKETBALL STRATEGY

This is a basketball coaching duty that has many ramifications. Suggestions regarding basketball strategy run throughout this entire book and many chapters could be devoted to this subject. The coach that can use his material, plays, and organization to the best advantage against each opponent, is a great strategist. Some of the more important points of strategy include the following:

1. *Proper planning of a game before it is played.* This, of course, depends on analysis of the opponents and of one's own team. It also depends on wise use of the scout reports of previous games.

2. *First-half strategy.* Stay with the plan until it is certain that it will not work. Analyze your team and the opponent's but see if the plan outlined prior to the game is the proper one. Make necessary changes as the half progresses.

3. *Half-time strategy.* In light of the findings of the first half, prepare the second half. It may be an entirely different game in the second half. Your opponents may try to cross you up; you must try to cross them up, if necessary.

4. *Second-half strategy.* Knowing what moves to make during the second part of the game is very often the deciding factor. This is particularly true in the closing minutes of a close game. The coach who allows himself to be carried away with the excitement of

the game will rarely win. He must carefully analyze and take advantage of every possible situation.

Strategy is divided into two main parts; individual strategy and team strategy. There are dozens of examples but it will suffice here to give a few examples of each to explain the possibilities.

Individual strategy:

1. Tie up a leading scorer by leaching him at all times.
2. Play a fast player loose unless he is an excellent long shot.
3. Make a right-handed player go to his left, and vice versa.
4. Screen out a key rebound man.
5. Play in front of a tall offensive man near the basket; prevent him from getting the ball.
6. Press a poor ball handler.
7. Put a strong offensive player against a weak defensive player, whenever possible.
8. If a short player is guarding a tall player, move your tall man into the pivot.
9. Be aggressive with a player that is timid or uncertain.
10. Players must constantly be aware of the possibilities of individual strategy. They should analyze their opponents early in the game and play accordingly.

Team strategy

This type of strategy, of course, covers a wide field. Here are a few examples:

1. Fast break a defensive team that is tired.
2. Use a fast break when the opponents are rebounding strong offensively.
3. Use set plays when the opponents are not on the offensive board and are getting back fast.

4. Use long pass attacks when the defense is congested under its own basket or is pressing.
5. Use a zone or combination defense against a team that has more speed, that cannot shoot long, or that uses screens.
6. Pass a zone defense out of position and overload sides on a zone.
7. Use screens against a tight man-to-man defense.
8. Shoot long against a loose defense.
9. When ahead, make the defense show.
10. Use a pressing defense against tired opponents.
11. Use a pressing defense against a team that is ahead and playing a possession game.
12. Press a team that is big. Do not let them get into scoring position.
13. Bottle up rebounders on a fast breaking team. Delay their first pass.
14. Use a fast break on a team that is big but play ball control against them after their defense is set.

Strategy is also planned effectively between halves and in chalk-talk meetings prior to, or following games.

Strategy between halves:

It is best to examine the charts for the first half while the players rest at the beginning of the intermission. The trainer takes charge at this time. Then carefully go over the second-half plan utilizing the results of the first half. The half-time period is also a good time to encourage morale. Players who have been under fire for a half are more receptive to a good "pep" talk; prior to the game, it makes most players extremely nervous. One other bit of strategy that may be in order is to give players adequate time to warm up before the start of the second half. In most cases five minutes is better than three minutes. "Get the jump on them in the second half" should be the slogan of every coach and team.

Strategy in chalk-talk meetings:

In addition to the strategy sessions prior to and during the game, there should also be strategy and chalk talks following the game. Meetings are always desirable on the following Monday or the day after the game. Plays and strategy that were good and bad may be taken up in these meetings, offering a chance for players to discuss and suggest. The team's statistical record for the game may also be given at this time. Meetings should also be held on the next opponent. A general discussion of strategy, plays to be used, etc., should be taken up at this meeting prior to going on the court. This avoids much time being spent standing around on the court when players are in uniform and should be active.

In conclusion, on the topic of strategy it might be said that like baseball, basketball is a great second guessing game. The strategy that works is wonderful; the strategy that fails is inexcusable.

In December, 1946, the University of Oregon team came East to play New York University in Madison Square Garden. N.Y.U., at that time, was ranked as the number one team in the nation. N.Y.U., therefore, entered the game a fifteen-point favorite.

Both teams employed the fast break and the first half was a free scoring affair which ended 37-37. At the half, the shooting chart indicated that N.Y.U. was getting in for too many short shots and was not hitting well from outside. This, along with the fact that N.Y.U. had rarely played against the zone and that Coach Howard Cann outwardly disliked the zone, caused Oregon to switch to that type of defense to start the second half. This plan upset N.Y.U. After two exchanges of baskets, Oregon scored thirteen straight points before N.Y.U. tallied again. Oregon went on to win 81-65 in one of the season's major upsets. The results were considered "great strategy." Newspaper reports, spectators, players, and

followers all commended the fine strategy that upset one of the nation's top teams.

In December, 1948, our Yale team played N.Y.U. in Madison Square Garden. The first half was very similar to the Oregon-N.Y.U. game of 1946. Yale had a four-point lead at the half which ended 37-33. Both teams employed the man-to-man defense in the first half as they had in the game in 1946. Again, all indications pointed to a change in Yale's defense in the second half. In addition to other factors, Tony Lavelli of Yale had four personal fouls. This time, however, the strategy backfired. N.Y.U. won the game in the last four minutes by the score of 76-67. The newspaper reports read "Terrible strategy. N.Y.U. gives Yale a lesson in how to attack a zone defense." Newspaper reporters were in the dressing room before we could get in. They demanded to know why such strategy would even be attempted.

There you have it, coaches. It is great to use strategy in basketball. The game lends itself to great possibilities along this line. However, like our other sports, the strategy that wins is the right strategy, always.

5. BASKETBALL SCOUTING

This topic has been thoroughly covered in the earlier chapters of the book.

6. MOVING PICTURES

A coach who is able to utilize moving pictures to the fullest extent will be well repaid. It has already been pointed out that they are of great value for instructional purposes. A few ways in which moving pictures may be used advantageously follow:

1. Take moving pictures of early season fundamental work for instructional purposes. It is valuable for your players to watch themselves and the other players in action.

2. Take moving pictures of as many home games as pos-

sible. They will be invaluable for scouting and instructional purposes.

3. Get copies of pictures of games taken away from home. Arrange with your opponents to get a copy of the film and give them a copy of your films when they play on your court.

4. Get pictures from central agencies on rule interpretations, fundamentals, and games. A study of these will be valuable.

7. TRAINING AND CONDITIONING

This important phase of basketball is divided into three main parts:

A. Physical condition off the court

This means that players must eat properly, get adequate sleep, and have good personal habits. They must be willing to refrain from drinking alcoholic beverages and smoking. Physical condition also includes proper attention to injuries and ailments. It also means that players should spend most of their time during the season in playing basketball and maintaining good scholastic averages if they are in school.

B. Conditioning on the court

This is the part that a coach can supervise more thoroughly. It is the duty of the coach to see that every player is in condition to play forty continual minutes of basketball. This is necessary not only from a health standpoint but also to win games. It is suggested that coaches build their teams up gradually, starting with short scrimmages, until a player is able to play continually for fifty minutes. High school coaches, of course, can regulate the time periods according to high school standards.

C. Mental condition

While there is no real scientific distinction between the physical and the mental, this part of the work refers to the

player's attitude and loyalty. Players who have great confidence and yet are not over-confident, who constantly think about winning, succeeding, making a basket, instead of losing, failure, and missing a basket, are the ones that will get there. They must, of course, be cooperative, and be willing to make sacrifices. They must have the proper attitude toward the coach, the other players on the squad, the officials, the spectators and all concerned. Of all the qualifications and qualities that a coach should look for in a player, I believe the most important ones are confidence, competitive ability and determination. A few stories will illustrate this point:

Bobby Anet was selected on "Chuck" Taylor's first All-America team in 1939, when he was captain of a national championship team. Bobby stood just under five feet nine inches and weighed 170 pounds. He was not a good shot and had very few qualities, on the surface, to recommend himself as a basketball player. However, he did have those qualities that are so important—confidence, determination, competitiveness—in other words, "*the heart*."

When Bobby came to college, he did not understand the intricacies of screen plays. Because of this, in his sophomore year, he had trouble breaking into the lineup immediately. Early in the season, we were having trouble with Washington State College, a very good screening team. One of their players repeatedly would cut off of a screen to score. The defensive player handling the assignment was a veteran, knew what to do, but did not quite have the speed or ability to stay with the man. Finally, I said to Bobby, who was sitting next to me on the bench, "That man has to be stopped, Bobby. Do you think you can do it?" "Sure, coach, I'll stop him," was the quick reply. "Do you understand how to switch men on those screens, Bobby?" I asked. "Do you see what that man is doing out there?" The reply this time was, "Yes, coach, I see. He's scoring baskets. I'll stop him." After Bobby entered the game, I really do not think the opposing

player that had been doing all the damage was ever in a position to set up a play. He was "dogged" unmercifully and did not score another point in the game. Perhaps the most scientific methods were not used but the player was stopped through determination and confidence.

When this same Bobby Anet was a senior, Oregon had a championship game in the Pacific Coast Conference with Oregon State College. Bobby had sprained his right wrist and had it bandaged for the game. It was questionable whether he should play, but the team physician had given his approval. Just having Bobby out there meant a lot to team morale. Prior to the game, I felt Bobby out by saying, "Better sit this one out, Bobby. You won't be able to handle the ball and score with that wrist." The expected reply was, "I feel fine, coach. I'll be O.K.," and then he added, "I'll throw them in with my left." This last statement was a joke, because Bobby, a poor scorer at best, could not make one out of twenty with his left hand.

In the middle of the second half, with the score tied, Bobby dribbled with his left hand down the side of the court and "let fly" with the same hand! The ball touched only the bottom of the net on the way through the basket. The goal swung the game in our favor and we never trailed after that. As Bobby ran by the bench after the goal he said, "How did you like that lefty?" Boys like Bobby are "clutch" players. They win games and championships.

It is always hard for a player to have a good mental attitude while he sits on the bench. Sometimes, players are great regulars but poor substitutes. John Dick, another Oregon All-America player in 1940, was this type of player. We were taking our first intersectional trip in 1938, and after playing in New York and Philadelphia, we had a game in Cleveland on the way home. "Slim" Wintermute was our center and John Dick was his understudy. Just before the half ended, "Slim" sprained his ankle. It was so bad that he had to be carried

from the court. The attending physician thought it was a certain fracture. "Slim" was rushed to the hospital. In the session between halves, I turned to John Dick, who had been a mediocre substitute and was fortunate to have made the travelling squad, and said, rather dejectedly, "It looks like we've lost a great center, John. What we do from here on in depends on you. This is your chance. Let's see what you have to offer."

Most players would have been tense and nervous. John Dick responded with a lazy grin and went out on the court to score eighteen points in the second half. John was never a substitute thereafter. Fortunately, "Slim" Wintermute had only a sprain and was back in action before we finished the road trip. Playing at forward with him was John Dick, who developed into one of the finest players the college game has seen. *A great regular but a poor substitute.*

Personally, I don't care for players who are content to sit on the bench any more than I care for players who are content to lose ball games. This does not mean that benchwarmers should be trouble makers and always dissatisfied. On the other hand, players who are not on the first team should come around and talk things over with the coach. They should find out how they can improve and convince the coach that they are competitors who can win ball games. Mental attitude is perhaps the most important of all conditioning. Players and teams that are right mentally will win many games that they otherwise would lose.

8. BASKETBALL OFFICIATING

This topic has been covered in Chapter 12. Coaches should do all that they can to develop and to help officials. And, while they should be able to referee a basketball game, coaches should not officiate at their own scrimmages. It is best to have an outsider do this for two reasons: first, the players will become accustomed to regular officials, and second, it is not

possible for coaches to concentrate on coaching the fundamentals and plays and officiate at the same time.

9. BASKETBALL PUBLICITY AND INTEREST

The coach's necessary contacts with the press, radio, video, the student body, and community are extremely valuable. Coaches should make it a point to become acquainted with all sportswriters and radio announcers, and others who are interested in basketball. Coaches who cooperate with publicity men will find that the results will be well worthwhile. Every effort should be made to acquaint the publicity men with the plans and activities of the squad. When press reports are inadequate or poor, it is because of misinformation or lack of information. Publicity men do a good job when given the opportunity. It is a good plan to have a weekly luncheon for all those in the locality who are writing about basketball. Radio and television men should also be included. At these luncheons, complete and accurate information about the team should be given out so that all may be kept well-informed. A brochure covering the schedule and plans for the season and personnel on the squad is another publicity requisite in both high school and college basketball.

It is equally important for coaches to have proper contacts and relationship with the student body. Student body publications and assemblies are good channels through which to work. Showing moving pictures, and giving demonstrations and periodic talks to the student body are also valuable.

It is well for the coach to appear before the various service clubs and church organizations in the community. If there is not a community athletic organization of some kind, there should be one and coaches can do more than anyone else to inaugurate it. This organization should extend through the entire year for all sports.

Coaches also should have a cooperative relationship with the faculty and parents. If faculty members understand the

plans and problems of the basketball squad, they will be far more cooperative. A coach should be a member of the faculty and basketball should be an educational activity. If necessary, the faculty should be educated along this line.

Parents are also entitled to know the contents of their children's sports programs. They should also be aware of the fact that coaches have a genuine interest in each player, both on and off the court. This is impossible without good relationship between parents and coaches.

10. *ARRANGING THE SCHEDULE*

The arrangement of schedules is an administrative function but the coach usually does and should have a part in it. Many factors should be considered. Some of these are the strength and experience of the team, gate receipts, travel problems, and the desirable number of games. For example, ordinarily it is better for an inexperienced team to play its easier games first and on their own court so that they will gain confidence for the games to follow.

Travel presents a problem in all sports, but a reasonable amount of it is beneficial in many ways. Naturally, most of the games away from home should be played on weekends so that players will not miss classes. Admittedly, a long trip is hard work for the coach. There are many details to be worked out in advance. The travel schedule, meals, hotel arrangements, practice periods, press or radio interviews—all of these must be worked out to the hour. A complete itinerary must be given to each player before departing. One long cross-country trip in college basketball necessitates hundreds of letters. Properly planned, however, a trip can be of great value to a team.

After taking teams across the country six times, I feel that travelling has many values. In the first place, players like to travel. Properly planned, travel is part of their education. Sightseeing trips, shows, and entertainment of various kinds,

should be arranged in addition to the basketball games to maintain the value of such travel.

In the games themselves, there is great value. In our first game at Madison Square Garden, our players did not like the rule interpretations or the officiating. The officiating was not poor but it was different. Our players finally learned to adjust to conditions away from home. They learned different styles of basketball and how to defend against them. All this was valuable experience. The same values are available to high school teams. It is not necessary to travel clear across the country to get the experience of playing in foreign territory.

Schedule building, then, is an important function of the coach. Proper attention to this duty may result in increased gate receipts and more games won.

11. *THE BASKETBALL BUDGET*

Preparing the budget is an administrative function, but coaches should be and usually are consulted. If a coach prepares a budget carefully and presents it to the administrators, it will very likely be considered and adopted.

A carefully planned budget will result in better equipment and facilities. Successful coaches show an interest in making a profit in their sport as well as an interest in winning games.

12. *BASKETBALL EQUIPMENT AND FACILITIES*

Coaches must be concerned with the proper purchase and care of basketball equipment. The most important items are balls and shoes. It pays to buy the best quality. The same types of balls should be used in practice that are used in games. The quantity should be sufficient so that every two players have a ball for practice purposes. Light shoes that hold the court well are essential. Shoes will last longer if each player has two pairs and wears them on alternate days. In addition, they will dry out better under this plan.

Uniforms and warm-up suits should be of good quality. Wool is always preferable next to the skin because wool absorbs perspiration. Light-weight wool jerseys are desirable and warm-ups should be lined with wool. It is an economical plan to adopt a pattern and then add a certain number each year, rather than changing patterns frequently.

Wool socks are preferable to cotton even though they present the problem of shrinkage from washing. Nylon socks are excellent, but expensive in the initial outlay. In the long run they are probably less expensive.

Each player should be made to feel responsible for equipment issued to him. A careful issuing system should be worked out and players should be asked to replace articles that are carelessly lost.

Much equipment and money can be saved by proper handling. Equipment should be kept clean and all wool garments should be dry cleaned. Careful storage in the off-season to prevent destruction by moths is also important.

Basketball facilities should be modern and standard. Coaches are urged to use rectangular glass backboards, if possible. In construction of new courts and revision of old ones, a 50 by 90 foot playing floor is desirable. Obstructions, so far as possible, should be removed. Seating arrangements should not interfere with the playing area in any way and there should be at least a six-foot border on all four sides of the court. Out-of-door courts are essential for use in good weather. Coaches that are willing to be concerned with good facilities and the upkeep and improvement of those facilities will usually have the most successful teams.

13. BIBLIOGRAPHY

Chapter 21 contains a complete, annotated bibliography of all basketball books published. New books should be added to this list as they are published. The Cumulative Book Index, available in most libraries, gives this information. Trade

journals such as the *ATHLETIC JOURNAL* and *SCHOLASTIC COACH* are also recommended. Coaches should keep up with the game by doing a reasonable amount of study and reading. Coaches also should have enough interest in the sport to write an occasional article and to do a bit of research when possible. Only through this type of effort will the game improve.

In conclusion, several suggestions in coaching methods are offered:

1. Make presentations clear and simple.
2. Cover fundamentals thoroughly but *get them playing* as soon as possible.
3. Use lots of competitive drills leading up to scrimmaging. Make fundamentals competitive. Drills must fit into style of play.
4. Use scrimmages frequently as soon as they are ready.
5. Don't give too many detailed plays. Stress team organization.
6. Have men available to work on charts and records. Substitutes may be used during scrimmages if necessary.
7. Try out experiments—things that are new and will interest players and spectators. Do this early in season or during the off-season.
8. *Plan your time* for each day in advance. Plan each practice carefully.
9. Encourage rather than criticize. Have patience.
10. Put some fun into the game.
11. Teach players rather than basketball. Put their interests first.
12. Have a bulletin board and use it. Let players know the daily plans in advance. Records of scrimmages and games, rating charts, daily practice schedules, trip itineraries, newspaper clippings, pictures, and announcements are items that may be displayed on the bulletin board.

Chapter 17

Fast-Break Basketball*

FAST-BREAK BASKETBALL IS LARGELY RESPONSIBLE FOR THE popularity of the game today. In twenty years of coaching this style of basketball, I never found a player who did not thoroughly enjoy playing it, once he was in the proper condition. The fast break gives every boy a chance to share in the scoring. It is also a great conditioner, and a crowd-pleasing style of play.

Many coaches think that a system is merely a group of plays or formations. However, plays are really secondary to the team's *attitude or philosophy* of offense.

Broadly speaking, there are two systems of offense.

1. *The fast-break offense*, which depends primarily on beating the defense back to the basket. Some teams always fast break upon gaining possession of the ball. Others fast break only when the opportunity presents itself. The real fast-break coach teaches the first method—breaking whenever possession is gained and applying pressure until the opportunity to score on the break closes completely.

2. *The slow-break or ball-control offense*, which permits the defense to retreat to its normal position and then attacks it with a definite system of plays or patterns.

The modern team must be well-grounded in both these offensive systems. Of the two, the second type, or set attack, is perhaps the most essential. The reason is simple enough.

* Diagrams of fast-break plays are given in connection with the discussion of proper use of material, Chapter 20, page 200.

A defense that is in position and organized cannot be attacked with a fast break. Because of this a team that uses the fast break must have something else to go with it—a weapon that can be utilized whenever the defense is set and waiting. Many coaches, for this very reason, believe that the set attack is sufficient *per se* and that a team will do well to master this style alone. However, a team that only slow breaks permits its opponent to rebound harder offensively and to loaf back or press, as it chooses, defensively.

A slow break and set plays alone are not enough as an offense. A fast break should be used to beat the defense back, and a set offense should be sprung once the defense is set and waiting.

The fast break is not simple to teach or easy to learn. It requires a sound grounding in such fundamentals as footwork, passing, dribbling, ball-handling, and shooting.

It also requires good organization and cannot be a hit-or-miss affair.

In addition to the proper instruction in fundamentals, adherence to fast-break rules, and the adoption of an organized pattern, there is the matter of attitude. A few stories will illustrate this point.

Upon installing the fast break at Yale it was discovered that only one boy had really played the break as I teach it. As luck would have it, he broke his wrist after the fourth game and was lost for the season. That meant not only teaching a new system to an entirely new group but also selling them on the idea of the fast break.

Tony Lavelli, who was perhaps the greatest shot in college ball, had been utilized mainly as the cog in a set-play system. Not a great speedster, Tony was not sure just how the fast break would work out; nor were the other players.

It took them nearly a half season to catch on to the idea of what was meant by the fast break and to develop the proper attitude toward it. They were extremely cooperative but

did not really understand what was meant by an offensive, fast-break state of mind, and this is extremely important.

Yale finally scored 80 points against Harvard in the last game of the season. This was not due to better playing but to a better *attitude* toward the fast break.

In teaching the fast break, it is difficult to change back and forth from a fast game to a slow game. This would be desirable but once players slow down, it is difficult to get them to speed up again.

I learned my lesson many years ago when I was a high school coach at Portland, Oregon. We had a speedy outfit, led by a nimble, full-blooded Indian called "Chief" McLean. Our foremost rival was a school with a zone defense and a little cracker-box gymnasium. I decided that once their defense was ready and waiting in those cramped quarters our fast breaking tactics would not work.

In the first three minutes, we galloped hard and scored eleven points. Then, McLean cried, "Set 'em up!" Our team abandoned its rush toward the basket and started passing the ball around. The bombardment of shots ceased. The ball changed hands twenty-five or thirty times before some player tried for a basket. Table tennis would have been more exciting.

The crowd began to stir restlessly and protests and catcalls chilled the back of my neck. Later in the game we attempted to fast-break once more, but that long stall had bogged us down. McLean and the other lads seemed frozen. I was finding out that the drive and attack of a basketball team could not be turned on and off like a tap. It had to be sustained or not used at all. We scored eleven points during the rest of the game.

The father of one of the players came up to see me after the game. He said, "My boy told me basketball was an exciting sport, but after the first few minutes out there it looked awfully dull and slow." I took a couple of complimentary

tickets out of my wallet and handed them to him. "You and your wife come to our next game, and you'll see a different performance. The entire game will be like those first few minutes. You learned something about basketball today, and so did I."

If it is a choice between the fast game and the slow game, give me the fast game every time.

"Keep moving!" is the best basketball maxim I know. Teams that constantly thrust into the opposition's side of the court are the teams that, in the long run, produce the most victories. They are superior, in my opinion, to teams that proceed cautiously, consider ball-handling more important than drive, and protect rather than fatten a slim lead.

Although the fast break lends itself to free scoring, it has been stressed that it should have the same careful organization as any attack. Unfortunately, some boys spoil the attack by taking wild, aimless shots, but players who pass up good chances are just as deserving of criticism.

An athlete can be too cautious. I do not approve of a team that fast-breaks by slam-banging down the court. But a squad that breaks sharp and fast for the basket the instant it gets the ball, and takes advantage of every chance will have trophies when the season is ended.

In a choice between the team that slam-bangs and the team that roots in its tracks and passes the ball back and forth, give me the slam-bangers. Their sin is not so great. At least they keep on the move and show some action. Fans would rather see a game that ends 62 to 60 than one that ends 22 to 20. As the 22 to 20 games have waned in number, the crowds have soared in size.

Chapter 18

The Zone Defense and How to Attack It

DOES THE ZONE DEFENSE HAVE A PLACE IN PRESENT-DAY basketball? This question has been the subject of debate by players, coaches, and spectators throughout the country. Some professional leagues have made the use of the zone defense illegal. Certain college conferences have had a gentlemen's agreement that the zone defense would not be used. Many have advocated legislation against it in the rules of basketball. The great majority, however, agree that this style of defense is an important part of basketball and too important a weapon used in winning games to be discarded. Most coaches who criticize the zone are unable to attack it successfully or feel that the use of the zone detracts from the action of the game and has little spectator appeal.

These remarks are not intended to uphold the use of the zone defense, but rather, to explain the zone and to present plans that may be used to attack it in a successful and spectator-appealing manner.

First of all, it should be pointed out that fundamentally, all teams use the zone defense. When one player defends the goal against two attacking players, that defensive player must know the fundamentals of zone defense and must play a zone defense. When two players guard the goal area against three attacking players, those two defensive players must play a zone defense. Therefore, a coach who does not teach the fundamentals of zone defense is sadly neglecting his duty.

Still, the player using the zone fundamentals must also employ proper man-to-man fundamentals. No defensive basketball player is sound who does not adhere to the proper execution of man-to-man fundamentals. A player must know how to guard an individual opponent properly, whether the team is playing a man-to-man, zone, or combination defense. Also, all teams employ the principles of zone defense in their team defensive styles. A team that constantly switches on screens, or a team that plays loose away from the ball in order to strengthen the defense around the keyhole area, is actually using elements of the zone defense, although they may call it man-to-man. Many games are played each year in which it is difficult to distinguish whether a team is actually using a zone defense or a man-to-man defense. The two can be very similar in appearance. A story will illustrate the point:

In 1939, our University of Oregon team played Ohio State for the national championship. Ohio State had an extremely fast team and they used a fast moving offense along with very hard, running screens that were difficult to stop. At the beginning of the game, Oregon used a zone defense. The men shifted their positions with the ball and kept their arms up. After two or three minutes, Ohio State stopped their regular offense and stationed their men in set positions and started passing the ball, making no effort to cut for the basket or screen. By signal, the Oregon team changed immediately to man-to-man defense but the players were careful to keep their arms up and play loose away from the ball, giving the defense the appearance of a zone. This plan continued for the rest of the game. Ohio State scored 33 points in the game which was extremely low for them. Most of their scores came from long shots. After the game, an Ohio State booster said, "Well, of course, they beat us with a zone defense. That isn't basketball. We don't even allow it in the Big Ten." Actually, we played a zone defense for about three minutes; long enough to cause Ohio State to discontinue their favorite offense.

The correct defense is one that takes away the offensive team's best weapons. In football, the best defense against certain offensive attacks may be the 6-2-2-1, the 7-1-2-1, the 6-3-2, or the five-man line. In baseball, the proper defense may be to shift the entire team in one direction to stop certain hitters. No one thinks of outlawing these defenses. It is the duty of the offense to learn to attack the new defense properly. The same is true in basketball. Unless the offense can beat the zone defense, it will remain in the game and still more teams will use it.

Zone defenses are of numerous types. The most common is the 2-1-2 which is used as the example in the diagrams found on page 195. The 3-2 and 2-3 are variations in which the center man moves up court or back under the basket. These are the standard types. The defensive shifts are very similar in all three. A modern zone does not limit the assignment merely to covering areas. It is usually more of a shifting defense with man-to-man aspects. The main idea is to cover the man with the ball and to congest the keyhole area with a strong defense. Properly executed, this defense does not permit dribbling. Nor does it permit passing into or through the keyhole area. It attempts to force the offense to attack mainly by means of long shots from the outer areas. Attacks against the 2-1-2 may be used against the 3-2 or 2-3 with little or no variations.

Unorthodox zone defenses such as the 1-3-1 do not present a problem to the well-balanced offensive team. The formation given in Diagram V on page 194 would be effective against the 1-3-1. This defense would not be sound against most teams because it could not cover the outside men, even in reasonably close scoring areas.

Attacks against the zone may be effective and also spectacular. These attacks may have just as much action as the attacks against man-to-man defense. There was a time when it was thought that the only possible ways to attack the zone were to pass it out of position or shoot over it. These methods

are still good but it is also possible to attack the zone by moving players as they move in attacking the man-to-man. The plays in diagrams V-IX on pages 194-195, give examples. From these, coaches can easily work out similar attacks depending on the material at hand. Other general measures that may be employed to cope with the zone defense are as follows:

1. Improvement in set shooting from outer areas. (Necessary to supplement any zone attack.)
2. Insistence on adequate and uniform facilities that will eliminate conditions conducive to the use of the zone—such as short or narrow courts or low ceilings.
3. Use of a fast-break offense that can attack before the zone defense is set and organized.
4. The use of an offensive formation against the set zone that is similar to or the same as that used to attack the man-to-man defense.

In attacking the zone, it is particularly helpful if the offensive team uses the same formation used in attacking the man-to-man defense. If this plan is not followed, it is easy for the defense to shift from man-to-man to zone and vice versa each time the offensive team changes its regular formation.

One other suggestion is made for the use of the offensive team in attacking the zone. It takes two teams to make a basketball game. Either team may, within the rules, ruin the game for the players and for the spectators. Many games have been ruined because one team employed the zone defense and the other team held the ball in mid-court and made no effort to play. If the offensive team is ahead, it may be their privilege to make the defense come out. The same is true against a man-to-man defense. Yet a team that makes no effort to score against any type of defense is really not helping the game. The exception to this, of course, might occur in the closing moments of the game, when strategy dictates that the team ahead protect its lead. If this stalling type of offense

is employed through the entire game, it becomes a very drab spectacle.

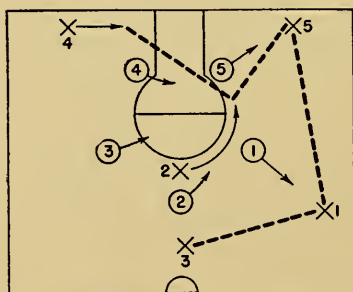
The proper way to beat the zone defense, or any defense, is to know how to attack it by well-executed plays, causing the opposing team to change their defensive tactics. No defense should be attacked by holding the ball in mid-court or playing a freeze game. Stalling, "freezing," or holding on to the ball, may be good basketball at times, but it is not the type of basketball that has made the game the greatest of all of our indoor sports and that has filled our gymnasiums and arenas from coast to coast. The zone defense or the loose man-to-man defense is not usually responsible for slowing down the game, and causing it to be a poor spectacle. More often, it is because the offense chooses to stop its efforts to score.

DIAGRAM V

Passing the Zone out of Position

(Effective against 1-3-1, 3-2
or 2-1-2 defense. May be
used against 2-3.)

Play No. 1



X3 passes to X1 who passes to X5 who passes to X2 who shoots or passes to X4. Play goes to either side by moving X3 to left and X1 to center.

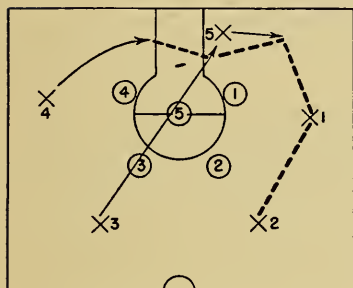
DIAGRAMS VI, VII, VIII, and IX

show passing the zone out of position with use of cutters.
(Possible against 3-2, 2-1-2, or 2-3 defense.)

DIAGRAM VI

Attacking the Zone

Play No. 2

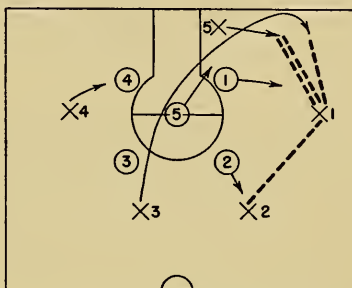


Zone attack: X2 to X1 to X5 who cuts to side. At instant X1 passes to X5, X3 cuts behind ⑤ for bounce pass. He shoots, or if ④ interferes, X3 bounce passes to X4 who moves toward basket. Goes to either side.

DIAGRAM VII

Attacking the Zone

Play No. 3

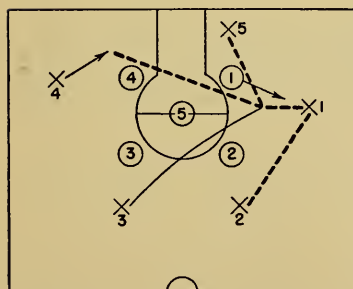


X2 to X1 to X5 back to X1 to X3 in corner who shoots over X5. Same play either side.

DIAGRAM VIII

Attacking the Zone

Play No. 4

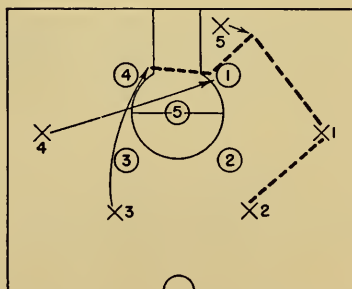


X2 to X1 to X3 to X5 or X4. Same play either side.

DIAGRAM IX

Attacking the Zone

Play No. 5



X2 to X1 to X5 to X4 who shoots or passes to X3. Either side.

Chapter 19

Better Defense

THE CHAPTER ON FAST-BREAK BASKETBALL EMPHASIZED the fact that today the game is predominantly an offensive one. With college teams hitting the one hundred point mark and professional teams frequently going over that mark, what is the peak to be? Do we need a balance in the game? Is defense neglected?

Many feel that the game is reaching a state of offensive hysteria. In spite of the fact that the game owes its popularity to high scoring, it can be overdone. Most people like to see a baseball game in which a few home runs are made rather than a 1-0 "pitchers' battle." However, most people do not enjoy a 23-20 baseball game. In football, fans like to see some touchdowns. However, it is doubtful that they would care to see a 60-50 football game. A basketball game can be a colorful, high-scoring affair and still include good defense.

At one time we had basketball games in which the scores were 20 points or less. These were defensive battles. Years ago coaches told us that if we could hold our opponents scoreless and each of us score one basket, we would win 10-0. Stressing defense in this manner was not uncommon, yet none of us feels that this was a desirable type of game, either for the players or for the spectators.

We needed to do something to open up the offense and we changed the rules. The very changes that have made the game a high-scoring one minimized the importance of good

defense. Some of these changes and their effects on defense are as follows:

1. *Elimination of the center jump*

This change, of course, helped the game offensively. It has made possible the popular, high-scoring game. However, this change has lessened the importance of defense, because, when a team is scored upon, they know they are going to get the ball again. In other words, the elimination of the center jump has actually made the field goal of less value.

Assume that our team scores eight field goals. As a result, we give our opponents a chance to score eight times, and if they are successful in 25 percent of their efforts, which is average, they will get four points. That means our net total on the eight goals is twelve points. Under the old rules, if our team scored eight field goals, the other team would theoretically get the ball four times if we break even on the tip-offs. If they again scored the usual 25 percent they would have one goal, and our net gain on the eight field goals would be fourteen points. Therefore, theoretically, it is considerably less important for the teams to play good defense under the new rule.

2. *The ten-second rule*

In making it necessary to bring the ball across the center line within ten seconds, the forcing defense all over the court has been nearly eliminated from the game, except in the closing minutes. While this rule may be helpful to the defense in one way, it has encouraged a lack of man-to-man defense and an increase in position or zone defense.

Along with the rule changes, there were other factors that came into the game that lessened the emphasis on defense. Some of these were:

1. *The one-hand shot*

This type of shot is not accurate more than twenty-five feet from the basket for most players. Its use in outer areas, to the exclusion of the two-hand shot, has encouraged zone and position defense. It has minimized the importance of playing a tight defense even out to the mid-court. The defense has in many cases been content to guard

the keyhole area only. This is not good for either the offensive or defensive phases of the game.

2. *Lack of defensive fundamentals*

During World War II, coaches of both school and service teams used the excuse, and justifiably, that they did not have players long enough to teach them the fundamentals of the game thoroughly, particularly good defense. The tendency, therefore, was to try to outscore the other team rather than to insist on reasonable defense when the opponents gained possession of the ball. This tendency still exists. Most coaches seem to agree that a better balance can and must be maintained in the game by placing more emphasis on individual and team defense. Coaches who are quick to realize this situation will not only win more games, but will improve the game greatly, for both the player and the spectator. There are certain definite ways in which this emphasis on defense may be brought about. One way, of course, would be to make rule changes to favor the defense just as we have made them to favor the offense. This, however, does not seem necessary. The problem can be met in other ways. Some suggestions follow:

a. Insist on good, sound individual fundamentals of defense. Be sure that every player knows how to guard an individual properly. Also, insist that he understand the intricacies of defense against screens of various kinds.

b. Be sure that the players learn the elements of zone defense individually. There are times when one man has to guard a territory under the basket while two or more opponents are coming at him; or when three come against two opponents.

c. Be sure that any offensive attack, whether it be a fast break or a set play, has at least one safety man and a definite defensive team organization in case the ball should be lost.

d. Be sure that the team has a definite plan for getting back on the defense, particularly against an opponent that is fast-breaking.

e. Be sure that the team is able to play a good, pressing man-to-man defense, which is the only defense possible when a team is behind and has to force play.

f. Team defense should also include a defensive plan for jump-ball, out-of-bound, and free-throw situations.

g. Be sure that your team has a good team defense against their opponents' set-play attack. In this case a team should be able to use at least two defenses. Your own material and the opponents'

attack are, of course, the determining factors. If the opponents depend on moving screens, perhaps your best defense would be a combination or zone defense. If the other team excels in long shooting or in a fast passing game, perhaps your best defense would be man-to-man or perhaps a combination of the two. Vary the defense to meet the offensive attack.

Chapter 20

Basketball Material and How to Use It

EVERY COACH HOPES FOR IDEAL MATERIAL. IT IS PRETTY hard to win races without the horses. We are constantly looking for that ideal combination in a basketball team or squad that will be a top contender and come home with a championship. Of course, all coaches may not agree on just what this ideal combination is and just what ideal material consists of.

I prefer to look for a combination of speed and size, with particular emphasis on the latter. It is granted that players must have reasonably good coordination and some natural basketball ability, desire, competitive attitude, and similar qualities. These factors may be developed by coaching. Speed and size can be improved but little. It is true that we can improve a player's speed slightly and teach him how to use his speed properly, but we cannot give him the ability to run fast. Neither can we give a boy an extra foot in height. We can teach him to use his height effectively but we cannot give a six-foot player an extra half foot to compete with the boy who is six feet six inches. Once a coach has decided, then, on the type of material he is looking for, how can this material be found or developed?

It is my opinion that coaches who are at an institution any length of time should have no alibi for constantly having poor material. The following suggestions may be of some help:

1. Basketball is a game composed of natural or fundamental skills. These include running, throwing, jumping, shooting, and similar activities. Every boy enjoys playing on a team if he has the opportunity to compete with others of similar ability. Therefore, it is the coach's duty to see to it that all boys in the school system have the opportunity to learn the game and to play on a team. This plan will not only render a great service to boys but excellent varsity material will come as a by-product of such a program. Medical examinations, of course, should be given before a player is permitted to compete.

2. See that fundamentals of basketball are included in the Physical Education program in the elementary schools in your community. Boys at this age should not play a great number of highly competitive games but fundamentals such as foot work, dribbling, passing, and shooting may be included in drills that are attractive and that will lead into the coach's particular style of play.

3. Junior high school teams should play a type of basketball similar to that used in the senior high. For example, if the high school senior team is employing a fast break, it is important that this feature be included in the system of junior high teams. Not only will this develop the type of material required but it also will stimulate greater interest on the part of the junior high school player and will activate his desire to play on the senior team.

4. Cooperate with and follow the industrial, church, and amateur leagues in your community that might have players of school age participating. In one instance, four out of five players who later made up a State championship high school team, were found playing on independent teams and did not turn out for the high school squad at all until the coach discovered them. Boys who work after school, or for some reason have not been reached in the school program, may be found in these leagues.

5. See that basketball facilities and teams are included in summer playground and recreational programs in your community. Basketball is now a year-round game. Where weather permits, playgrounds should have out-of-door courts. Tennis courts, for example, may be made into combination courts by putting baskets at each end. Summer leagues in basketball are possible. The more basketball that is played in your community, the greater chance you have of developing material.

6. Be sure that you reach every possible candidate enrolled in your school. Every boy who enrolls should fill out a form giving his

experience in all sports and his desire to participate. These should be followed up and every possible candidate interviewed. Intramural programs should be provided for those who cannot make the first squad. The coach should watch the progress of every candidate very closely and be constantly on the lookout for new and better material.

7. Most important! Be patient with and retain on the squad all really big boys until you are sure they have no chance. A six foot six inch boy, awkward as a Freshman, may win a championship for you as a Senior. Many tall boys look hopeless when they first turn out for basketball. Sound advice to any coach is—*don't sell the big man short*. The best way to beat the tall man is to get one taller.

However, try as we may, sometimes the material is not up to par and seldom is it all that the coach desires. Regardless of the quality of the material, the coach who can get the best out of what he has is usually near the top. Adjusting the material to the system or the system to the material (both are important) are major coaching problems. More often than not, however, a coach may use his favorite system with minor changes to fit the material rather than use an entirely different system with which he and the returning players are not familiar.

GENERAL HINTS ON USE OF MATERIAL

The following combinations of speed and size are the possible ones with which coaches may have to work. For each combination, suggestions are offered for fast-break and set-play offense (against man-to-man defense). Basic diagrams are given with a sample play. Coaches may work out variations and options to suit particular needs. It is recognized, of course, that certain stages of the game, the score, the type of opponents, etc., may always dictate the offensive style of game. These suggestions are offered for use under normal or general conditions:

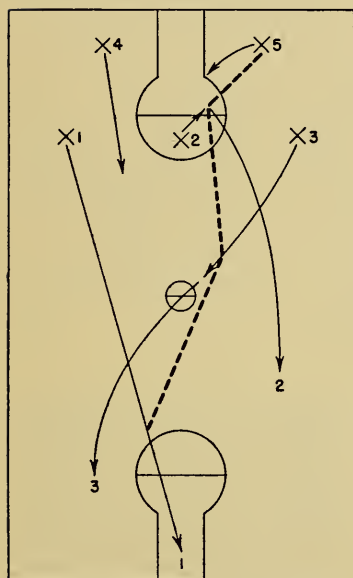
1. Three big men and two smaller fast men (the ideal combination).
 - a. Ideal for fast break illustrated in Diagrams X and XI on page 205.
 - b. Use set plays that do not require five men moving and do not pull big men away from offensive board.
 - c. Use big men for screeners and rebounders.
 - d. Use small men as set shots and cutters. Plays from Diagrams XII and XIII on page 206 recommended. Play in diagram XIV, page 207, also good.
 - e. Ideal for 2-1-2 zone or combination defense or assigned man-to-man.
2. Two big men and three smaller men.
 - a. Ideal for fast break illustrated in Diagrams X and XI.
 - b. Use set plays that have three men moving and utilize two big men for rebounds. Variations of the double post are good. Plays from Diagrams XII, XIV, XV and XVI on pages 206-208 recommended.
 - c. Assigned man-to-man defense or 3-2 zone usually best, depending on speed and ability of players.
3. One big man and four smaller men.
 - a. Fast break may be used but success will depend on beating defense back for direct scores, as rebound strength is not great.
 - b. Use single pivot with big man in bucket and four men moving. Ideal for four-man weave, give-and-go game, etc.
 - c. Use set shots with caution due to weak rebounding. See Diagram XII on page 206; also, Diagrams XIV, XVIII and XIX on pages 207 and 209.
 - d. Man-to-man defense recommended. Pressing man-to-man should be possible.
4. Four big men with one small man (not recommended for a team unless at least one of big men is fast and an exceptional ball handler).
 - a. Utilize Diagram XI fast break if one of big men is fast and can handle ball well. Long pass break may be possible. Rebound strength is strong.
 - b. Set plays should utilize rebound power. Not good usually for a moving offense. Set screens, double or triple post plays are best. See Diagrams XIII, XV, XVI, and XVII on pages 206-208.

- c. Zone defense recommended. Assigned man-to-man defense also necessary.
- 5. Five big men (not recommended for a team unless at least two of big men are fast and exceptional ball handlers).
 - a. Utilize Diagram XI fast break if two of big men are fast and can handle ball well. Great rebound advantage.
 - b. Use set plays that utilize rebounding. Double or triple post plays and set screens good. Use set shots to take advantage of rebounding. See Diagrams XIII, XV, XVI and XVII on pages 206-208.
 - c. Zone defense best. Assigned man-to-man also necessary.
- 6. Five small men (the long hard winter combination). Hard to compete with team like this but not impossible. By playing all court defense against larger opponents, a team of this kind may regain possession of the ball often.
 - a. Fast break must be used with great caution as rebounding is weak. If used at all, team must score directly on break by beating defense back.
 - b. Set plays should utilize five men moving. Diagram XVIII on page 209 using single pivot and changing pivot men would be good. Also, formation such as Diagram XIX on page 209 that spreads defense and makes possible quick cuts into the basket is good.
 - c. Ball control, short certain shots, with more than a little courage and luck must be the ammunition of this type of team.
 - d. All man-to-man defense. Should be able to use all variations of man-to-man, particularly a pressing defense.

DIAGRAM X

*Short Pass Fast-Break Attack
Down Center*

(Possible to use with any combination) Preferably, X4 and X5 should be big men. Others should be fast and good ball handlers.

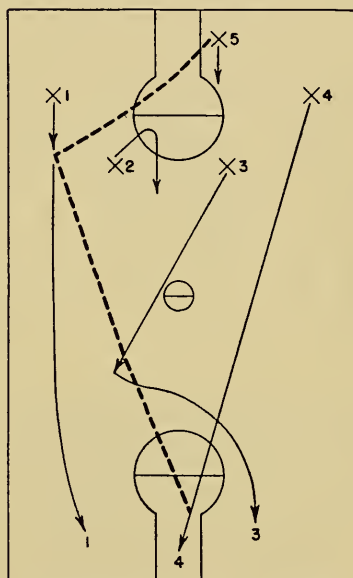


X5 takes rebound and passes to X2. X2 passes to X3 who passes to X1 cutting for basket. X5 trails as safety. X4 continues down court for rebound duty. Play may be used to either side. Other options may also be worked out.

DIAGRAM XI

*Long Pass Fast Break Down
Sides*

(Possible to use with any combination) Preferably, X1, X4 and X5 should be big men. X2 and X3 should be fast and good ball handlers.

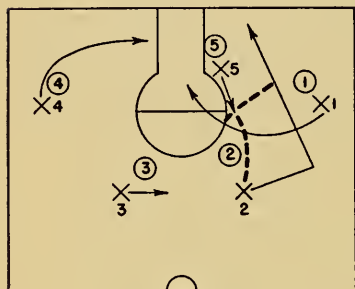


X5 takes rebound and passes long to X1 down side. X1 passes to X3 who drives across court. X3 passes to X4 cutting for basket. X1 and X3 cut down court for rebound duty or for return pass. X5 trails as safety X2 goes to meet first pass, then trails play. Same play either side. Other options may be worked out.

DIAGRAM XII

Post Play from Single Pivot Formation

Good with 3 big men, 2 small men, or 2 big men and 3 small men. X4 and X5 should preferably be big. Possible with 1 big man, 4 small men.

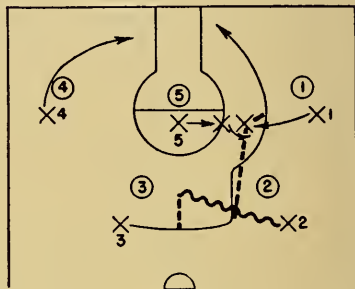


X2 passes to X5 who meets pass. X1 cuts around post man X5 screening ①. X2 cuts to side line to keep defense occupied, then cuts outside of X1. X5 passes to either X1 or X2 for score. X3 is safety. X4 goes in on left side for rebound. X5 also rebounds. Same play either side.

DIAGRAM XIII

Double Post from Single Pivot

Good with 3 big men, 2 small men or 2 big men, 3 small men. Possible with 4 big men and 1 small man. X1, X5 and X4 should be big men.

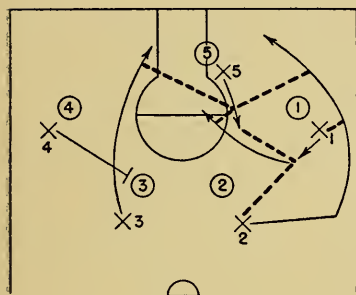


X2 dribbles inside of X3 and hands off to X3. At same time, X1 and X5 come together. X3 passes to X1. X1 cuts around X5 for return pass, screening ③. X1 may also hand off to X5 coming around later. Other options may be used. X2 is safety. X4, X5 and X1 rebound. Same play either side.

DIAGRAM XIV

Single Pivot Variation

Screen on and away from ball.
Good with three big men, two small men; two big men, three small men. Possible with other combinations. Big men X1, X5, and X4, preferably, are used for screeners.

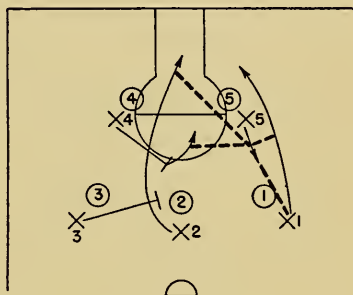


X2 passes to X1 and cuts for sideline to occupy defense. At same time, X4 screens ③ and X3 cuts on outside for basket. X1 passes to X5 and cuts around him, screening ①. X5 passes for score to X3, X1 or X2 whichever is open. X4 is safety. X5 and X1 or X3 rebound. Play goes to either side.

DIAGRAM XV

Double Post Play

X4 and X5 should be big. Others may be smaller but should have speed, and be good ball handlers.

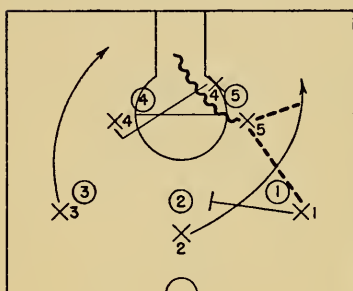


X1 passes to X5 as X4 and X3 both screen ②. X2 cuts on outside to receive pass from X5 and score. If ④ takes X2, X4 cuts for basket and receives pass from X5. X5 may also pass to X1 on right side. X3 is safety. X5 and X4 rebound. Same play either side.

DIAGRAM XVI

Double Post Play

X4 and X5 should be big men. Others may be smaller but should have speed and be good ball handlers.

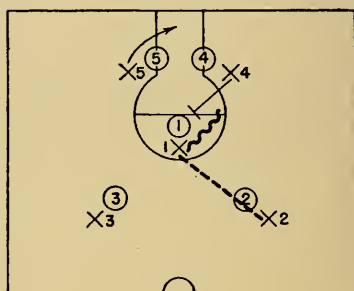


X1 passes to X5 and moves over to screen ②. At same time, X4 screens ⑤ and X5 dribbles around screen for score or passes to X2 on right side. X1 is safety. X3 cuts on left side for rebound or possible pass. X4 also rebounds. Same play either side.

DIAGRAM XVII

Triple Post Play

Used with three or four big men. X1, X4 and X5 must be big. They screen for each other or for X2 and X3 and work the boards.

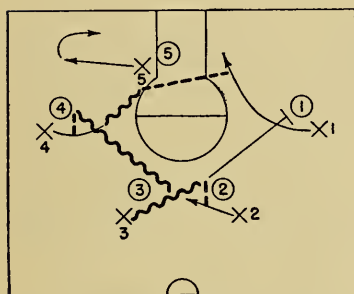


X2 passes to X1 as X4 screens ①. X1 dribbles around screen for score. X5 and X4 rebound. X2 and X3 are safety. Many similar options may be used.

DIAGRAM XVIII

Single Pivot with 4-Man Weave

Good with four small, fast men with one big man. Possible with five small men. X1, X2, X3, and X4 must have ball-handling ability.

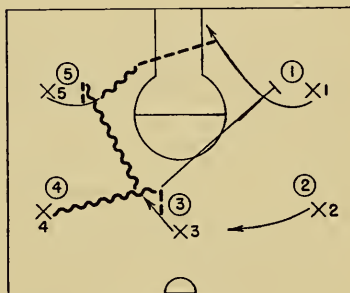


X3 dribbles inside of and hands off to X2. X2 dribbles inside of and hands off to X4 as X3 continues over to screen ①. X4 dribbles around X2 for score or may pass to X1 for score. X5 takes ⑤ out of play, then comes in for rebound. X3 and X2 are safety. Plan offers numerous similar options.

DIAGRAM XIX

Spread Formation for Ball Control

Similar to Diagram XVIII except 5-man instead of 4-man weave. All should be good ball-handlers. Five small men could use this for regular attack. Center should be kept open.



X4 dribbles inside of and hands off to X3. X3 dribbles inside of and hands off to X5 as X4 continues over to screen ①. X5 dribbles around X3 for score or may pass to X1 for score. X4 and X3 may rebound. X2 is safety. Similar options are possible.

Coaches who are willing to work hard to develop material and have ability to use it properly will be the successful ones.

Chapter 21

Complete Annotated Bibliography of Basketball Books

Every basketball coach should be familiar with the literature in the field. This is important not only for a knowledge of the history and progress of the game, but for all coaching purposes. It is also important for basketball scouting. Only through a thorough knowledge of the game as expressed by those actively engaged in the field will coaches be able to analyze the game.

With this thought in mind a complete bibliography of every book that has been written on basketball since its origin is listed below. Annotations are included in the hope of giving helpful information to coaches.

Allen, Forrest C., *Better Basketball*. New York: Whittlesey House, McGraw-Hill Book Company, 1937. 490 pp.

Probably the most complete book on basketball. Dr. Allen is one of the best-known coaches; he has been head coach at the University of Kansas for over twenty-five years.

All fundamentals, styles of offense and defense, subordinate plays are fully covered. Section on conditioning, training, first aid, bandaging, and taping is very complete. Basketball Tales is an interesting and unique feature. One disappointment is that the zone defense, for which Dr. Allen is noted, is not explained in detail. Book recommended for all coaches.

Allen, Forrest C., *My Basketball Bible*, 7th ed. Kansas City: Smith-Grievess Company, 1928.

An earlier book on all phases of basketball. Has been duplicated

in Dr. Allen's later book: *Better Basketball*. Valuable now only as a historical reference on basketball.

Allen, Forrest C., and others. *Rating Basketball Players; Their Batting and Fielding Averages Computed*. University of Kansas, Lawrence, Kansas: The Author, 1939. 25 pp.

Mimeographed publication of players' records at University of Kansas during seasons of 1937-38 and 1938-39. Attempts to rate players on shooting percentages and other fundamental statistics. Valuable and interesting study for all coaches.

Andersen, Leonora E., *Basketball for Women*. New York: The Macmillan Company, 1929.

Author has edited *Basketball Guide for Women* and is prominent teacher of basketball. Good general reference for women's basketball. Needs revision.

Andersen, Leonora E., *An Athletic Program for Elementary Schools*. New York: A. S. Barnes and Company, 1934, Chapters IV, V, VI.

Skill tests in basketball for elementary children; lead-up games to basketball. One of the more complete sources of information on basketball for grades one to twelve.

Angell, Emmett D., *Basketball for Coach, Player and Spectator*. Chicago: Wilson Western Sporting Goods Company, 1918.

One of the earlier pamphlets on basketball written for Wilson. An advertising feature, but very useful in its day. Valuable now only as a historical reference.

Bancroft, Jessie H., *Games*. New York: The Macmillan Company, 1927, pp. 412-414, 450-465, Basketball.

List of lead-up games for basketball; games of basketball skills for all age levels through elementary grades; regular basketball as it applies to elementary school children.

Barbour, Ralph Henry, and LeMar Sarra, *How to Play Better Basketball*. New York: Appleton-Century Publishing Company, 1941. 111 pp.

Written for junior and senior high school boys. Fundamentals, offensive and defensive plays, team management, list of player hints, how to officiate. Play diagrams; glossary.

Barry, Justin M., *Basketball; Individual Play and Team Play*. Iowa City: The Clio Press, 1926. 123 pp.

Written by Sam Barry while coaching basketball at University of Iowa. For past ten years has been coach at University of Southern California. An expert on basketball.

Book needs revision but section on fundamentals is still good.

For present coaching purposes, more modern books are recommended. Book interesting for style of game played twenty years ago.

Bee, Clair F., *Basketball Annual*. New York: Universal Publishing and Distributing Corporation, 1948. 128 pp.

Articles and stories of basketball written by college and professional coaches and others. Good entertainment.

Clair Bee is coach at Long Island University.

Bee, Clair F., *Drills and Fundamentals*. New York: A. S. Barnes and Company, 1942. 111 pp.

Clair Bee's idea of basketball fundamentals and how to teach them. Not complete in details. Illustrations and diagrams. No bibliography.

Bee, Clair F., *Man to Man Defense and Attack*. New York: A. S. Barnes and Company, 1942. 118 pp.

A complicated, detailed analysis of certain styles of man-to-man defense and offensive attacks for each. Recommended for the college coach. Diagrams are very complicated. Illustrations are interesting but do not always explain the subject. No bibliography.

Bee, Clair F., *The Science of Coaching*. New York: A. S. Barnes and Company, 1942. 101 pp.

A practical book for the basketball coach. Chapters on The Coach, The Player, Conditioning and Training, Practice and Coaching Methods, and Game Strategy and Tactics are all good. Offensive and defensive basketball covered rather generally but there are better sources for this material. Play diagrams and picture illustrations from actual games are used. No bibliography.

Bee, Clair F., *Zone Defense and Attack*. New York: A. S. Barnes and Company, 1942. 117 pp.

Probably the most complete analysis of the zone defense available. History, development, principles of zone covered; all styles explained with offensive attacks for each; diagrams and illustrations. Book not practical for the beginner in coaching or playing; recommended for the college coach. No bibliography.

Bliss, James G., *Basketball*. Philadelphia: Lea and Febiger Publishing Company, 1926.

Included as historical reference.

Bruce, Robert M., *Annotated Bibliography of Basketball Literature*.

The National Association of Basketball Coaches, 1947. 151 pp.

An indexed, annotated, bibliography of books and periodical

publications on basketball through April, 1947. An excellent reference and source of information.

Robert Bruce did this work as a master's thesis at Springfield College.

Bunn, John W., *The Art of Basketball Officiating*. Springfield, Massachusetts: M. F. Stibbs, 1948.

A modern and much needed book covering all phases of officiating.

Bunn, John W., *Basketball Methods*. New York: The Macmillan Company, 1939. 327 pp.

Written after Mr. Bunn had enjoyed several highly successful seasons at Stanford University. A disciple of Dr. Allen, Kansas basketball coach, the author features zone defense. All parts of the game are well covered; one-hand shooting, made nationally popular through Hank Luisetti at Stanford, is explained in detail. Daily practice schedules and methods of instruction are valuable features.

Butler, George D., ed., *The New Play Areas; Their Design and Equipment*. New York: A. S. Barnes and Company, 1938, pp. 42, 70-72, 99, 101.

Important information on out-of-door basketball courts; type of material to be used, construction, dimensions; converting wading pools into basketball courts; popularity of the out-of-door basketball game. Of particular value to all physical educational directors and coaches. Present trends indicate great development of out-of-doors basketball.

Carlson, Harold C., *Basketball Research in Fatigue*. National Association of Basketball Coaches, 1945.

A scientific study showing the effect of basketball on the human body. Relation of the game to fatigue. Should be read by every coach.

Carlson, Henry Clifford, *Basketball: The American Game*. New York: Funk and Wagnalls Company, 1938. 189 pp.

A complete basketball book featuring continuity or Figure Eight basketball as used by Dr. Carlson at the University of Pittsburgh. This popular style of offense is used in some variation by most coaches. Practical for classes as well as advanced teams. Illustrations and diagrams.

Chandler, William A., and George F. Miller, *Basketball Technique*. Menomonie, Wisconsin: Dunn County News, 1922.

Mr. Chandler is coach at Marquette University. Included as historical reference.

Chicago Park District. *Basketball Fundamentals Fully Illustrated*. Chicago: Chicago Park District, 1938. 92 pp.

Pamphlet published on basketball as a part of recreational series; valuable for any elementary instructor of basketball or for players. Covers fundamentals only.

Converse Rubber Company, *Basketball Yearbook*. Malden, Massachusetts: Converse Rubber Company, 1942. 49 pp.

An annual publication. Has records and pictures of leading college and high school teams; articles on basketball by leading coaches; Chuck Taylor's All America selections; national tournament summaries. A valuable basketball booklet for all coaches even though advertising is the motive. Back copies should be kept for reference.

Cordell, Christobel M., *Basketball Assemblies*. Portland, Maine: Platform News Publishing Company, 1942. 45 pp.

Reference in basketball administration.

Cummins, Robert A., *A Study of the Effect of Basketball Practice on Motor Reaction, Attention and Suggestibility*. Princeton, New Jersey: Psychological Review, 1914. 21:356-359.

Important reference in research and testing in basketball.

Daher, Joseph G., and Clair F. Bee, *Fundamentals of Basketball*. Charleston, West Virginia: Morris Harvey College, 1941. 146 pp.

Other books by Clair Bee cover same material and are more complete.

Dean, Everett S., *Progressive Basketball*. Stanford University, California: The Author, 1942. 190 pp.

Mainly the system of basketball taught by Everett Dean at Stanford University. Fundamentals and styles of offense and defense are explained in a practical manner. Chapters on Coaching Methods, Condition and Training, Psychology and Strategy, and A Daily Practice Schedule are excellent. Coaching philosophies contributed by nineteen outstanding college coaches are an interesting and unique feature. Play diagrams. Illustrations by members of the national championship Stanford team of 1942. One of best books on basketball.

Everett Dean coached for ten years at Indiana University before going to Stanford as basketball coach in 1940.

Encyclopedia Americana. New York, Chicago: Americana Corporation, 1941, Vol. 3, pp. 312-13.

A very brief paragraph on the history and rules of basketball. Very incomplete bibliography. Not recommended as an extensive source of information on the subject.

Encyclopaedia Britannica. Chicago: Encyclopaedia Britannica, Inc., 1941, Vol. 3, pp. 181-182.

A good history of basketball. Philosophy, popularity, strategy, summary of rules are included. Basketball for girls and boys explained. One-goal basketball described. One court diagram. One illustration.

Evans, Harold C., *Some Notes on College Basketball in Kansas*. Topeka: Kansas Historical Quarterly, 1942. 2:199-215.

Fish, Marjorie E., *Theory and Technique of Women's Basketball*. Boston, New York: D. C. Heath and Company, 1929. 137 pp.

Fundamentals are well illustrated. Later books are more complete.

Frost, Helen, and Charles D. Wardlaw, *Basketball and Indoor Baseball for Women*. New York: C. Scribner's Sons, 1920. 154 pp.

Excellent book in its day. Fundamentals of basketball well explained. Still valuable as reference for basketball during that period. Both authors were experts on basketball.

Frymir, Alice W., *Basketball for Women; How to Play and Coach the Game*. New York: A. S. Barnes and Company, 1928. 259 pp.

History and development of basketball; qualifications of the coach; basketball courts and equipment; all basketball fundamentals explained in detail; offensive and defensive basketball covered; how to play positions, healthful living habits and diet, competition for girls. Has limited number of diagrams and illustrations. An excellent book on women's basketball.

Gee, Ernest Richard, compiler, *The Sportsman's Library: being a Descriptive List of the Most Important Books on Sport*. New York: Bowker Company, 1940. 158 pp.

Includes a list of basketball books.

Gregg, Abel J., ed., *Basketball and Character*. New York: Association Press. Date not listed by C.B.I.

A pamphlet published between 1933 and 1937 by the Association Press (National Council of Y.M.C.A.).

Griffith, John L., and George P. Clark, *Basketball Plays and Attack; Fundamentals of Basketball; Fundamentals of Basketball Defense; Training the Basketball Team*. Chicago: Wilson Western Sporting Goods Company. Date not listed by C.B.I.

Four separate pamphlets published prior to 1928 for Wilson. Sold for fifty cents each and contain advertising material. Out of date now but useful as historical reference on basketball.

Gulick, Luther, *How to Play Basketball*. London: British Sports Publishing Company, 1907. 89 pp.

Mr. Gulick worked with Dr. Naismith in originating basketball. Book should be very valuable historical reference. One of original Spalding Athletic Library books, Group 7, No. 27.

Gulick, Luther, *A Symposium on Basketball*. Springfield, Massachusetts: American Physical Education Review, 1909. 14:376-389.

Another historical reference by one of the originators of basketball.

Gullion, Blair, *Basketball Offensive Fundamentals Analyzed*. Cornell University, Ithaca, New York: The Author, 1938. 82 pp.

An excellent analysis of the usual basketball fundamentals. Results of a study in slow motion moving pictures of players executing the fundamentals. Illustrations are excellent. No bibliography.

Blair Gullion is coach at Washington University, St. Louis, and is a product of Indiana basketball.

Gullion, Blair, *One Hundred Drills for Teaching Basketball Fundamentals*. Richmond, Indiana: The Author, 1933. 47 pp.

Written when Mr. Gullion was coach at Earlham College, Richmond, Indiana. Very useful and practical for coaches and class teachers of basketball.

Gullion, Blair, *Basketball Offensive Fundamentals*. Knoxville, Tennessee: The Author, 1936. 84 pp.

Written when Mr. Gullion was coach at University of Tennessee. His later publication, *Basketball Offensive Fundamentals Analyzed*, covers the same material.

Hager, Robert H., *Percentage Basketball*. Oregon State College, Corvallis, Oregon: The Author, 1926. 112 pp.

Mr. Hager was coach at Oregon State College when book was written, but is no longer coaching.

An offensive style of basketball explained thoroughly; still used in some degree by many coaches; still a valuable reference. Fundamentals and defensive play also covered.

Hawley, Gertrude, *An Anatomical Analysis of Sports*. New York: A. S. Barnes and Company, 1940. 191 pp.

Healey, William A., *High School Basketball*. Minneapolis: Burgess Publishing Company, 1940. 68 pp.

A book for high school coaches; practical and easy to read. Duplicated pretty much in author's later book: *Coaching and Managing High School Basketball*.

Healey, William A., *Coaching and Managing High School Basketball*. Danville, Illinois: Interstate Printing Company, 1942. 194 pp.

Designed for the high school coach. History and growth of basketball; fundamentals, team offense and defense; suggestions to coaches; basketball tests; purchase and care of equipment; recent developments in basketball, are all well covered. Practical and easy to understand. Diagrams, illustrations, bibliography.

Distributed by the National Federation of State High School Athletic Associations, Chicago, and by A. S. Barnes and Company, New York.

Hillas, Marjorie, and Marian Knighton, *An Athletic Program for High School and College Women*. New York: A. S. Barnes and Company, 1938, Chapter VI.

Achievement tests in basketball; basketball squad practice; basketball relays; variety of basketball games. One of later and better references for women's basketball.

Hinkle, Paul, *Basketball's Assistant Coach*. Tiffin, Ohio: Saygers Sport Syndicate, 1933. Not listed in C.B.I.

Hepbron, George T., *How to Play Basketball*. New York: American Sports Publishing Company, 1904. 76 pp.

One of first books on basketball. Included for historical reference. One of Spalding's Athletic Library books, Vol. 17, No. 193.

Hobson, Howard A., *The All America Basketball Player Record and Scout Book*. New Haven, Conn.: Walker-Rackliff Co., 1948.

Not a textbook, but a book for scouting and recording individual player achievements during the season. Covers 35 games.

Hobson, Howard A., *Basketball Illustrated*. New York: A. S. Barnes & Company, 1948. 86 pp.

A well illustrated elementary book for boys and young coaches. Excellent for the beginner. Covers all fundamentals thoroughly. Gives examples of offensive plays and defensive formations. Features training, conditioning, and self-testing activities for the player. 102 illustrations; 14 diagrams. No bibliography.

Howard Hobson coached twelve years at the University of Oregon before coming to Yale as coach in 1947. His team won the National Championship in 1939.

Hobson, Howard A., *The Official Basketball Scout and Record Book*. New Haven, Conn.: Walker-Rackliff Co., 1948.

Not a textbook, but a book for scouting and recording player and team achievements during the season. Covers 35 games.

Holman, Nathan, *Championship Basketball*. Chicago: Ziff-Davis Publishing Company, 1942. 155 pp.

The various fundamentals and team plays that make a championship team when properly executed. Fundamentals are well illustrated; man-to-man defense is very good. One of better books for coaches. Film under same title also available through author.

Mr. Holman has been coach at College of the City of New York for many years and was one of the outstanding professional players of all time.

Holman, Nathan, *Winning Basketball*. New York: C. Scribner's sons, 1935. 215 pp.

A good basketball book. A more general treatment than Mr. Holman's later publication: *Championship Basketball*. Various features of offensive and defensive styles of basketball are well covered. The two-hand set shot is explained well.

Hood Rubber Products Company. *Basketball Hints*. New York: Hood Rubber Products Company.

Booklets published by Hood between 1933 and 1937. Were distributed each year for advertising purposes but were very valuable; still good for references on fundamental notes. Include list of do's and don't's on offense and defense; plays and articles by leading coaches.

Howard, Glenn W., *A Measurement of the Achievement in Motor Skills of College Men in the Game Situation of Basketball*. New York: Teachers College, Columbia University, 1937 (Teachers College, Columbia University. Contributions to Education, No. 733). 109 pp.

A scientific measurement of skills executed by college players in games. Observation of each player for a specified length of time by expert judge; subjective methods and results not entirely satisfactory, but this is a study that should be examined by all coaches; should be an inspiration for much needed testing in basketball.

Dr. Howard is not a basketball coach but is professor of physical education at Queens College, New York. His dissertation is probably the first one ever done specifically in the field of basketball.

Hughes, William L., ed., *The Book of Major Sports*. New York: A. S. Barnes and Company, 1938, pp. 139-209.

Devotes a section to each major sport written by an expert in each sport. The basketball section is written by Charles C. Murphy, who duplicates this section in his book, *Basketball*. A rather ordinary treatment of the fundamentals of basketball. Questions for discussion and test questions on various phases of basketball are valuable.

Dr. Hughes was coach at DePauw University prior to his appointment as professor of physical education at Temple University. Indiana University, *King Basketball*. Bloomington, Indiana: The Author.

In print in 1928 and is distributed by Indiana University Book Store, Bloomington, Indiana. Included as historical reference. International Amateur Basketball Federation, *Official Basketball Rules for Men as Adopted by International Basketball Federation for 12th Olympiad, 1936-1940*. New York: Amateur Athletic Union of United States, 1936.

Interesting rules adopted for 1936 Olympics. Height factor considered for other nations; all rules pertaining to squads as well as game itself. Valuable for historical reference.

Jones, Ralph R., *Basketball from a Coaching Standpoint*. University of Illinois, Urbana, Illinois: The Author, 1916. Not listed in C.B.I.

Included as historical reference.

Jourdet, Lon W., and Kenneth A. Hashagen, *Modern Basketball*. Philadelphia: W. B. Saunders Company, 1939. 165 pp.

A very complete book with excellent illustrations and diagrams. Section on set shooting excellent; all fundamentals; mainly eastern styles of offense and defense; coaching problems.

Mr. Jourdet was coach at University of Pennsylvania.

Kennard, Ada B., *Tips on Girls' Basketball*. Detroit: *Sport Tips and Teaching Aids*, 1914. Not listed in C.B.I.

Practical for both players and teachers. A minimum of reading material and maximum of good diagrams. Wall charts also available.

Lambert, Ward Lewis, *Practical Basketball*. Chicago: Athletic Journal Publishing Company, 1932. 243 pp.

One of most complete publications on basketball. Short and long passing fast break; simple fundamentals properly applied; man-to-man defense, are features. Conditioning and training, coaching principles and suggestions very good. Revision necessary but still very practical book for all coaches.

Ward Lambert was coach at Purdue University for over twenty-five years and was one of the best coaches in the country—recently retired.

Martin, Warren L., *Shifting Basketball Defense*. Winfield, Kansas. Not listed in C.B.I.

Included as historical reference.

Mather, Edwin J., and Elmer D. Mitchell, *Basketball; How to Coach the Game*. New York: A. S. Barnes and Company, 1925. 109 pp.

An early illustrated book on basketball. Some fundamentals still apply but more recent books are better. Valuable only as a reference for basketball twenty years ago.

Meanwell, Walter E., *Science of Basketball for Men*. Madison, Wisconsin: H. D. Gath, 1924. 382 pp.

Explains the Meanwell short pass game in detail. Also covers all fundamentals well; particularly good on man-to-man defense. Probably best of earlier books and still quite practical except for team plays. Published in 1922 under title, *Basketball for Men*.

Dr. Meanwell was coach for many years at University of Wisconsin and was one of the leading coaches twenty years ago.

Meissner, Wilhelmine E., and Elizabeth Y. Myers, *Basketball for Girls*. New York: A. S. Barnes and Company, 1940. 87 pp.

Fundamentals thoroughly covered; offense and defense for each player; equipment, fundamentals of teaching; officiating, diagrams, and illustrations. Modern and practical. One of the best books on girls' basketball.

Meissner, Wilhelmine E., ed., *Official Basketball and Officials Rating Guide for Women and Girls, Containing Rules for 1944-1945*. New York: A. S. Barnes and Company, 1944. 112 pp.

Published for National Section on Women's Athletics of the American Association for Health, Physical Education and Recreation.

Standards for women's basketball; progressive basketball programs for grades one to twelve; basketball in service programs; officials rated for each state; official basketball rules and interpretations; selected bibliography. The first requisite for coach or teacher of basketball; also valuable for players and spectators.

This is an annual publication. Back copies should be kept for reference.

Messer, Guerdon N., *How to Play Basketball*. New York: American Sports Publishing Company, 1921. 101 pp.

A thesis in pamphlet form on the technique of the game. Earlier edition published in 1911. One of Spalding's Athletic Library books, Group 5, No. 193. Valuable for historical reference. Miller, Ben W., and Karl W. Bookwalter and George E. Schlafer, *Physical Fitness for Boys; A Manual for the Instructor of the Service Program*. New York: A. S. Barnes and Company, 1943, Chapter VIII.

Team and group games of basketball; basketball for large classes; basketball tournaments; variations of basketball activities. Valuable for all physical education instructors.

Miller, William H., *Basketball of Tomorrow*. Tulsa, Oklahoma: The Jordon Company, 1938. 110 pp.

Mr. Miller is a veteran coach of Amateur Athletic Union teams. The Tulsa D. X. Oilers won the national championship under his coaching.

Mitchell, Elmer D., *Intramural Sports*. New York: A. S. Barnes and Company, 1939. 113 pp.

Details of arranging and managing college intramural tournaments; basketball tournaments covered thoroughly; basketball as most popular tournament game. Valuable for high school as well as college instructors.

Murphy, Charles C., *Basketball*. New York: A. S. Barnes and Company, 1939. 94 pp.

Printed from plates of *The Book of Major Sports*, edited by William L. Hughes, except photographic illustrations, which are supplied by Scholastic Coach.

A rather ordinary treatment of the fundamentals of basketball. Questions for discussion and test questions at the end of each chapter are valuable features.

Naismith, James A., *Basketball: Its Origin and Development*. New York: Association Press, 1941. 198 pp.

The last book by the inventor of basketball; how the game started; basketball in the earlier periods; present-day basketball; the future of the game. Interesting for general public; essential for all coaches and instructors for knowledge of game.

Naismith, James A., and Luther H. Gulick, *Basketball*. New York: American Sports Publishing Co., 1896. 30 pp.

The first book on basketball. Authors originated the game. Explains how the game is played; general rules of the game; coaching suggestions. Valuable as historical reference. One of Spalding's Athletic Library books, Volume 2, No. 17.

National Federation of State High School Athletic Associations, *Official Basketball Rules for 1944-45; National Federation Edition*. Chicago: The Author, 1944. 64 pp.

Intended for high school use. A copy of the basketball rules adopted by the National Basketball Committee. Includes records and statistics of high school basketball with all state tournament results of the previous year. Published annually. Back copies should be kept for reference.

Distributed by National Federation and by A. S. Barnes and Company, New York.

National Federation of State High School Athletic Associations. *Basketball Game Administration Handbook*. Chicago: The Author. Date not listed by C.B.I.

Published in two volumes. Distributed by National Federation and by A. S. Barnes and Company, New York.

Neilson, Neils P., and Frederick W. Cozens, *Achievement Scales in Physical Education Activities for Boys and Girls in Elementary and Junior High School*. New York: A. S. Barnes and Company, 1939, pp. 18-19, 46-48, 112-114.

Tests on basketball throwing for girls and boys; test procedure. Should be valuable inspiration to coaches for more testing in basketball.

Neilson, Neils P., and Winifred Von Hagen, *Physical Education for Elementary Schools*. New York: A. S. Barnes and Company, 1930, Part II.

A graded program of basketball for elementary schools. Games that lead up to basketball and other basketball activities are explained for each grade level. Useful for the elementary school teacher.

Nicholas, James R., *Technique of Basketball Officiating*. [1926]. 122 pp.

Included as historical reference.

Olsen, Harold, *Offensive Systems*. Tiffin, Ohio: Saygers Syndicate. Not listed in C.B.I.

Mr. Olsen was coach at Ohio State University.

Peterman, Mark A., *Secrets of Winning Basketball*, rev. ed. Danville, Illinois: Interstate Printing Company, 1941. 96 pp.

Recommended for the high school coach. Distributed by National Federation of High School Athletic Associations, Chicago, and by A. S. Barnes and Company, New York.

Porter, Harold V., ed., *Basketball Play Situations*. Chicago: Na-

tional Federation of State High School Athletic Associations, 1944. 80 pp.

Correct interpretations on play situations for each rule; sanctioned by Oswald Tower, official interpreter of the National Basketball Committee; section for basketball officials; 311 problems solved for the coach and player. Valuable for all instructors; only book of its kind published.

Published each year. Back copies should be kept for reference. Ruby, James C., *Team Play in Basketball*. Champaign, Illinois: Basketball Book Company, 1931. 157 pp.

A separate book dealing with team plays of various kinds, both offensive and defensive; value of team work in games; selection of squad. Duplicated in Part III of author's book: *Coaching Basketball*.

Ruby, James C., *Coaching Basketball*. Champaign, Illinois: Basketball Book Company, 1931. 307 pp.

Published in 1926 under title: *How to Coach and Play Basketball*. Mr. Ruby wrote these books when coach at University of Illinois. He is no longer coaching.

One of the best sources on fundamentals. Other sections need revision. Good reference for middlewestern basketball during earlier period.

Rupp, Adolph F., *Championship Basketball*. New York: Prentice-Hall, Inc., 1948. 239 pp.

Adolph Rupp's philosophy and system of basketball as used at the University of Kentucky. A very complete basketball book covering all phases of the game. Coaching stories are a feature. 107 diagrams. Index.

Adolph Rupp has coached two National Championship teams at the University of Kentucky. He was the United States College Olympic Coach in 1948.

Smith, Hubert H., *Administration and Educational Values of a District Basketball Tournament*. New York: Teachers College, Columbia University, 1926. 7 pp.

A Phi Delta Kappa Thesis at Teachers College, Columbia University. Should be valuable to high school coaches and physical education directors.

Tower, Oswald, ed., *Spalding's Official Basketball Guide for 1940-1941*. New York: American Sports Publishing Company, 1940.

Last publication of the guide by A. G. Spalding Brothers. This and all back copies of annual guide should be in library of the

coach for reference. Divided into sections on college and high school records; official ratings; rules and interpretations.

Tobin, James F., ed., *Spalding's Official Basketball Rules for 1940-1941 as Adopted by the Amateur Athletic Union of the United States*. New York: American Sports Publishing Company, 1940.

A.A.U. rules written when A.A.U. was not a member of National Basketball Board.

Tobey, Dave, *Basketball Officiating*. New York: A. S. Barnes and Company, 1943. 73 pp.

Conditioning of the official; equipment, duties, officiating systems, single and double; game situations; ethics and relationships of the official, are all well covered. Chapter called Do's and Don't's is an added feature. Illustrations and diagrams. Recommended for officials and coaches.

Dave Tobey has been a prominent basketball official for over twenty-five years. He was coach at Savage College.

Tower, Oswald, ed., *The Official Basketball Guide*. New York: A. S. Barnes and Company, 1943. 256 pp.

The official rules as adopted by the National Basketball Committee of the United States and Canada. Includes records and reviews of past season in all sections; college conference and tournament summaries; basketball editorials; basketball officials' section. Published annually. The most important book for coaches, players, and spectators. Coaches should keep back copies as reference for rule changes, history, and records.

United States Bureau of Aeronautics, Navy Department, *Basketball*. Washington, D. C.: United States Naval Institute, 1943. 257 pp.

One of several books on major sports written by expert coaches while in United States Navy. Intended for use in schools of all levels, including colleges; also playground and recreation centers. Stress is on mass participation.

Naval aviation basketball program reviewed; team defense and team offense; court facilities; the out-of-doors possibilities of basketball; equipment, safety precautions, ground school foundations; class organization and instruction. One of best books for instructors of basketball.

Veenker, George F., *Basketball for Coaches and Players*. New York: A. S. Barnes and Company, 1930. 234 pp.

Very complete book that is still practical. Fundamentals explained with illustrations. Simple plays diagrammed; particularly

good on man-to-man defense and attacks against it. Recommended for all coaches.

Mr. Veenker was coach at Iowa State College. He is no longer coaching.

Wardlaw, Charles Digby and Whitelaw R. Morrison, *Basketball: A Handbook for Coaches and Players*. New York: C. Scribner's Sons, 1921. 231 pp.

Fundamentals of basketball explained; training suggestions; administrative duties of the coach; how the game is played. Illustrations and diagrams. A very useful book in its day and valuable now as a history reference of basketball. Not recommended for the coach of present-day basketball.

Welsh, R., *Winning Basketball*. Minneapolis: Burgess Publishing Co., 1947.

APPENDIX

Glossary

ABUSED AREA—	The medium area where players seem to take more bad shots.
ALL-ROUND PLAYER—	A player who is expert in all phases of the game.
ANGLE, PROPER—	Defensive term meaning the act of taking a position between the offensive player and the basket at a certain angle.
AREAS—	Certain designated parts of the playing court.
AREA-SCORING METHOD—	A suggested method of awarding different points for field goals scored in different areas.
ASSIST—	A pass made by a player that directly contributes to a field goal.
ATTEMPTS—	An attempt to score a goal; a shot.
BACK COURT—	That part of the court between the center line and the end line behind a team's opponent's basket.
BALL-CONTROL GAME—	A conservative offensive plan used to protect a lead; a percentage game.
BALL-HANDLING—	Ability of the player to control the ball well in all situations.
BALL HAWK—	A player who is expert in retrieving the ball; a ball recovery expert.
BALL, LOOSE—	A ball not in possession of either team.
BASKET—	The ring eighteen inches in diameter with white net, through which the ball is thrown to score a goal; also used interchangeably with field goal.
BASKET SHOOTING—	Shooting the ball at the basket.
BASKET SHOOTING CHARTS—	Charts or forms used to record attempts and goals.

BENCH—	Section reserved for team officials and for players while not participating in the game.
BENCH WARMER—	A player who sits on the bench.
BOARDS—	Basketball backboards.
BOTTLE UP—	A defensive term which means to stop the offense from functioning effectively.
BOX SCORE—	Summary of the game records.
BREAK, THE—	The fast break.
BUCKET—	Keyhole area; around the basket; bucket means basket.
CATCALLS—	A term attributed to spectators' cheers that are unsportsmanlike. Remarks that are uncomplimentary.
CATCHING—	The act of catching or receiving the ball.
CENTER—	Name of one of the positions on a basketball team.
CENTER JUMP—	The two centers jump for the ball which is tossed up between them at the start of the game, at the start of the second half and at certain other times; a tip-off; a jump ball.
CHALK TALK—	A meeting on basketball.
CHANGE OF PACE—	The act of moving at different and alternating speeds over the court.
CHANGING MEN—	A defensive term meaning that defensive players change assignments.
CHART—	A form on which objective or subjective data are recorded.
CHARTING—	Recording of objective data during the course of a game or scrimmage.
CLINCHER—	A goal that seems to assure victory.
CLUTCH—	A period when the game is close.
CLUTCH PLAYER—	A player who plays well in the clutch or when the game is close.
COACH—	One who teaches a team or squad the game of basketball.
CONVERTED FREE THROW OR SHOT—	A free throw or shot that is successful; a goal.
COURT—	The playing floor.
CRACKER BOX GYMNASIUM—	A small gymnasium—under regulation size.
CRASHING THROUGH—	A defensive term meaning that the defensive

player stays directly with his assignment on screen plays by staying between his man and the screener.

CRIPPLE—

A type of shot—an easy short shot.

CROSS SCREENING—

Players cross to screen out opponents from basket on rebounds.

CROSS UP—

The act of doing what the opponents do not expect.

CUTAWAY—

Offensive term meaning that player cuts for the basket after setting a screen. Used when defense changes assignments too fast.

CUTTER—

A player who runs or cuts on the court, usually for the basket.

CUTTING PLAYS—

Plays that use players who cut or run from one position to another.

DEFENSE, ALL
COURT—

A style of defense in which players are guarded tightly in all parts of the court.

DEFENSE,
COMBINATION—

A combination of man-to-man and zone defense.

DEFENSE, FORCING—

A pressing defense; a tight defense; an effort to force the offensive team into action.

DEFENSE, INDI-
VIDUAL—

A player's individual defensive techniques such as defensive footwork, ball hawking, and guarding.

DEFENSE, KEYHOLE—

A team defense that plays in the keyhole area and does not force play in the outer areas; a loose defense.

DEFENSE, LOOSE—

A sagging defense; a defense that converges to the center; a defense that does not press.

DEFENSE, LOOSE
AWAY FROM THE
BALL—

A defense in which the defensive players guarding men not near the ball play well away from their men; used to congest the keyhole area.

DEFENSE, MAN-TO-
MAN—

A defense that gives each player a definite opponent to guard.

- DEFENSE, SLIDING— A defense that enables players to stay with regular assignments.
- DEFENSE, SWITCHING— A defense that permits players to change defensive assignments repeatedly.
- DEFENSE, ZONE— A defense that gives each player an area of the court to cover.
- DEFENSIVE BACK-BOARD WORK— Defensive rebound techniques.
- DEFENSIVE FOOTWORK— Various techniques of footwork employed by a player while on defense.
- DEFENSIVE PLAYER— A player on the team not in possession of the ball; a player attempting to prevent an opponent from scoring.
- DOGGED— A defensive term meaning the act whereby an opponent is guarded closely at all times.
- DOUBLE UP— Defensive term meaning to put two players against one.
- DRAW THE DEFENSE OUT— An offensive plan to make the defensive players come to the outer areas of the court in order to relieve congestion near the basket.
- DRIBBLE— Throwing, batting, bouncing, or rolling the ball and touching it again before it touches another player.
- DRIBBLE, BROKEN— A discontinued dribble in which the ball comes to rest in one or both hands of the dribbler; a violation.
- DRILLS— Exercises given to train players in basketball skills.
- DRIVE IN— A player's effort to dribble hard toward the basket in an effort to score.
- DROP OFF— Defensive term meaning to play loose or away from an opponent.
- DUNKING— A word used to describe the action of a tall man who jumps high and reaches above the rim of the basket to drop the ball through the basket.
- ERRORS, BASKETBALL— Loss of ball, and personal fouls.
- FAKE— An offensive fundamental action that draws a defensive player out of position.

FAN—	A spectator.
FAST BREAK—	A system of team offense that attempts to advance the ball to the front court for scoring opportunities before the defense is organized.
FEED—	A pass; to feed the ball to a player is to pass it to him.
FIELD—	The playing floor.
FIGURE 8—	An offensive plan in which all five players move in a manner that forms the figure 8.
FIRST STRING—	The first squad or the first team.
FLOOR PLAY—	General ability in playing the game offensively aside from shooting, such as ball handling, passing, and dribbling.
FOOTWORK—	Various movements of the basketball player in which the feet are used.
FORWARD—	Name of one of the positions on a basketball team. Originally thought of as an offensive player who played in the front court. Forwards and guards now perform similar duties.
FORCE PLAY—	To press the team with the ball in an effort to make them play faster.
FOUL AREA—	Keyhole area.
FOUL, DELIBERATE—	An intentional foul.
FOUL OUT—	Being forced to leave the game after committing five personal fouls.
FOUL, PERSONAL—	A player foul which involves contact with an opponent while the ball is in play or after the ball is in the possession of a player for a throw-in from out-of-bounds.
FOUL, TECHNICAL—	A foul that does not involve contact; not a personal foul.
FREE BALL—	A ball not in possession of either team that is in play.
FREE THROW—	Privilege given a player to score one point by an unhindered throw for goal from a position directly behind the free-throw line.
FREE-THROW ATTEMPT—	A try or attempt or shot at the basket made in an effort to score a free throw.
FREE THROWER—	A player in the act of shooting a free throw.

- FREE-THROW LANE—** Areas at each end of the court; an area between the foul line and the end line.
- FREE-THROW LINE—** A line fifteen feet out from the basket from which free throws are attempted.
- FREE-THROW PERCENTAGE—** Percentage of free throws made; number of free-throw attempts divided into number of free throws scored; free-throw shooting average.
- FREEZE THE BALL—** To hold the ball and make no effort to score.
- FRONT COURT—** That part of the court between the end line behind a team's own basket and the center line.
- FUNDAMENTALS—** Elementary skills of the game such as dribbling, shooting, passing, and similar skills.
- FUNDAMENTALS, GROUP—** Fundamentals executed by two, three, or four on a side.
- FUNDAMENTALS, INDIVIDUAL—** Fundamentals executed by one player or one player on a side.
- GALLOP—** A term used to describe a player running at full speed.
- GAMES ABROAD—** Games played away from home.
- GIVE-AND-GO—** An offensive plan in which players pass the ball to a teammate and run for the basket or to another position—usually for a return pass.
- GLASS BOARDS—** Backboards made of glass.
- GOAL—** Made when the ball enters the basket from above and remains in or passes through.
- GOAL, FIELD—** Goal scored from the field or playing floor other than a free throw; a field goal counts two points.
- GOAL, FREE-THROW—** A goal scored from the free-throw line as a result of a penalty. A free-throw goal counts one point.
- GOING THROUGH—** A defensive term meaning that a player stays with his assignment on screen plays by going through a gap between his defensive teammate and the screener.

GUARD—	Name of one of the positions on a basketball team. Originally thought of as a defensive player who played in the back court. Guards and forwards now perform similar duties.
HAND OFF—	Act of handing the ball to another player.
HEART, THE—	Will to win. Competitive ability.
HEAVE—	A goal attempt—a shot.
HELD BALL—	When two players have one or both hands on the ball so firmly that neither can gain possession without undue roughness. Ball is tossed between the two players who jump for it. Also used interchangeably with "jump ball."
HELD-BALL RECOVERY—	A retrieve of the ball on a jump for the ball following a held ball.
HOLD THE COURT—	Term applied to basketball shoes. Shoes that will not slip on the basketball floor.
HOME COURT—	The playing floor of the home team.
HOME RUN OF BASKETBALL—	A long shot that, it is suggested, might count three points instead of two points as at present.
INTERCEPTION—	Taking the ball away from an opposing player or team while the ball is in play; for example, an intercepted pass.
INTRA-SQUAD—	Between squad members. Groups that are members of the same squad.
INTRAMURAL—	Between two groups that are members of the same institution.
JUMP BALL—	A jump ball takes place when the official tosses the ball up between two opposing players.
JUMP, GETTING THE JUMP ON A TEAM—	The act of getting ahead of the other team at the start.
KEYHOLE—	The areas from the end lines inside of the free-throw lanes including the free-throw circles.
KEY MAN—	A valuable player.

LEACHING—	A defensive term meaning to guard an opponent closely at all times.
LEFTY—	Left-hand shot at the basket.
LET FLY—	To shoot at the basket in a careless manner.
LOOSE BALL—	A ball not in possession of either team.
LOSS OF BALL—	Possession of the ball changing from one team to the other.
MAJOR GAMES—	A conference or league game or their equivalent.
MAJOR SPORTS—	Generally regarded as those sports that have the most participants and spectator appeal, such as football, basketball, baseball, track, swimming, and hockey.
MAKE DEFENSE SHOW—	An offensive plan to cause the defense to make the first move or to commit itself.
MATERIAL—	Players available to a coach to work with or teach.
MENTAL HAZARD—	A disconcerting factor that a player has to contend with that may affect his mental attitude during the game.
MID-COURT—	Center area of playing floor.
MINOR GAME—	A non-conference or practice game.
MONEY PLAYER—	A player who is a good competitor when the game is close.
NATIONAL INVITA- TIONAL—	A basketball tournament sponsored by the Metropolitan Sports Writers of New York City.
NCAA—	National Collegiate Athletic Association.
NEUTRAL COURT—	A playing floor that is the home court of neither team.
OBSERVATIONS, OB- JECTIVE—	Observations that can be made by two or more persons with the same results.
OBSERVATIONS, SUBJECTIVE—	General observations not included under objective observations; in this study, subjective observations are made by a basketball expert.
OBSERVER—	One who watches the game as an analyst; a recorder of objective or subjective data; a scout.

OFFENSE, INDIVIDUAL—	A player's individual offensive techniques such as faking, dribbling, passing, and shooting.
OFFENSIVE BACKBOARD WORK—	Offensive rebound techniques.
OFFENSIVE FOOTWORK—	Various pivots, stops, and turns executed by a player while on offense.
OFFENSIVE PLAYER—	A player on the team that has possession of the ball; a player attempting to score.
OFFICIALS—	The referee and umpire of the game. They are assisted by two timekeepers and two scorekeepers.
OPPONENTS—	Players or teams to be played against.
OUTFIT—	A team.
OUT-OF-BOUNDS—	The territory beyond the sides and ends of the court.
OUT-OF-BOUNDS PLAYS—	Offensive plays employed when the team has possession of the ball for a throw in from out-of-bounds.
OVERTIME—	An extra playing period in effect after the regular period of the game, when a game is tied.
PASS—PASSING—	Tossing or throwing the ball from one player to the other.
PASS, BASEBALL—	A one-hand pass, similar to a baseball throw, usually a long pass.
PASS, BOUNCE—	A pass in which the ball is bounced once before it reaches its destination.
PASS, CHEST—	A pass with one or two hands that starts with the ball held near the chest.
PASS, HOOK—	A wrist action, one hand pass made over the head.
PASS, ONE-HAND—	A pass in which the ball is passed or tossed with one hand.
PASS, ROLL—	A pass in which the ball is rolled on the floor.
PEP-TALK—	Coach's remarks to a team prior to, during, or between halves of a game.

PERCENTAGE BASKET-

BALL—

A style of play that stresses ball control and taking only close shots where the shooting percentage should be high.

PERCENTAGE OF

SHOTS—

Number of shots or attempts divided into number of goals or baskets scored.

PIVOT—

A step or steps taken by a player in different directions with one foot while the other foot is held in place.

PIVOT AREA—

Keyhole area.

PIVOT, DOUBLE—

An offensive plan that uses two pivot or post men.

PIVOT, FRONT—

A pivot in which the player turns or pivots forward.

PIVOT MAN—

An offensive player who plays in pivot area; keyhole area.

PIVOT, REAR—

A pivot in which the player turns or pivots to the rear.

PIVOT, SINGLE—

An offensive plan that has only one man playing offensively in the keyhole area.

PIVOT, TRIPLE—

An offensive plan that uses three pivot or post men.

PLAYER NUMBER—

Number on jersey of the player.

PLAYING TECH-

NIQUE—

Skill employed by the players.

PLAYS—

Offensive plans of a team to score goals.

PLAY THE BALL—

To press or force defensively; to go after free balls.

POINTS—

Credit for goals; free-throw goals count one point each and field goals count two points each.

POINTS-RESPONSIBLE-

FOR—

Points that a defensive player permits his opponent to score.

POST—

Keyhole area. Player assuming the position of a post.

POST, DOUBLE—

An offensive plan that uses two post men.

POST MAN—

A player who takes a position similar to that of a post so that teammates will cut past

	him and cause their defensive players to come in contact with him.
POST, TRIPLE—	An offensive plan that uses three post men.
PRESS—PRESSING—	To play a tight defense; to play close to the player with the ball in an attempt to take the ball from him.
QUICK CHANGE—	Defensive term in which players change defensive assignments quickly on screen plays.
RATING SCALE—	A rating plan by which a player is rated in relation to others on the squad.
REBOUND—	A retrieve of the ball from the backboard after an unsuccessful shot at the basket.
REBOUND, DEFENSIVE—	Retrieve of the ball from the opponent's backboard.
REBOUNDER—	A player who retrieves the ball from the backboard; a retriever of rebounds.
REBOUND, OFFENSIVE—	A retrieve of the ball from a team's own backboard.
REBOUND, TEAM—	A rebound that is awarded the team; one not recovered by an individual player.
RECOVERY—	A retrieve of a ball not in possession of either team or a retrieve of a ball in possession of an opponent.
REGULAR—	A player on the first team; one who plays regularly.
RETRIEVING—	Gaining possession of a free or loose ball.
REVERSE—	Offensive act of player who makes a quick stop and reverses his direction.
ROAD TRIP—	A trip made to play basketball games away from home.
ROLL—	Offensive term meaning that player turns for basket after setting screen. Used in similar manner as the cutaway.
ROLL, DOUBLE—	A roll by two players consecutively.
SCORE—	Point or points resulting from a goal or goals.
SCORE, RUNNING—	The progressive score of each team during the game, point by point.
SCOUT—	One who watches the game as an analyst;

	a recorder of objective or subjective data; an observer.
SCOUTING—	Analyzing individual and team performances, objectively and subjectively.
SCOUT REPORT—	Recorded objective and subjective observations of either or both teams during the game.
SCREEN—	To set up a post on which a teammate may screen his defensive player; to screen a player from an area.
SCREEN, MOVING—	A situation in which the player doing the screening is on the move and not stationary.
SCREEN, STATION- ARY—	A situation in which the player doing the screening is in a stationary position while screening.
SCRIMMAGE—	An intra-squad game.
SECOND GUESSING—	The custom of offering the correct way of doing something after it is done; having the right answer after something fails.
SECOND-HALF TEAM—	A team that plays better in the second half.
SET PLAYS—	Offensive team plays used to attack a team defense that is set or organized.
SHOOT—	To try for a goal by tossing, throwing, or tapping the ball toward the basket.
SHOOTING AVERAGE—	Percentage of shots made; similar to batting average in baseball.
SHOT—	A try for a goal by tossing, throwing, or tapping the ball toward the basket.
SHOT, BACKBOARD—	A shot in which the ball hits the backboard before going through the basket.
SHOT, BAD—	A shot that is not fundamentally correct.
SHOT, BLOCKED—	A shot deflected by a defensive player.
SHOT, CHEST—	A two-hand shot that starts from a chest position; usually a set shot.
SHOT, EARNED—	A good shot; a shot that the defense cannot block.
SHOT, FIELD—	A shot from the field or playing floor other than a free throw; a field-goal attempt.

- SHOT, GOOD— A shot that is fundamentally correct; a shot that cannot be guarded; a shot that is accurate.
- SHOT, HOOK— A wrist-action, one-hand shot made over the head.
- SHOT, INSIDE— A player who shoots short area shots. Also, shots taken in short areas.
- SHOT, LAY-IN— A short shot off the backboard or layed just over the rim of the basket.
- SHOT, LAY-UP— A short shot in which the ball is banked off the backboard.
- SHOT, LONG— A shot taken in the long area, outside of a twenty-four foot radius from the basket. This area is considered the two-hand shot area.
- SHOT, MEDIUM— A shot taken in the medium area between a radius of twelve feet and twenty-four feet from the basket. This area is so selected because it is considered the one- or two-hand shot area.
- SHOT, ONE-HAND— A shot in which the ball is pushed or thrown toward the basket by one hand.
- SHOT, OUTSIDE— A player who shoots long-area shots. Also, a shot taken in the outer area.
- SHOT, OVERHEAD— A type of shot in which the starting position of the ball is over the head.
- SHOT, PIVOT— A shot taken following a pivot or turn by the shooter; usually taken in the keyhole area.
- SHOT, PRACTICE— A shot taken in practice sessions where no defense is encountered; not a scrimmage or game shot.
- SHOT, REBOUND— A shot that is the direct result of a rebound.
- SHOT, SET— A shot taken from a stationary position.
- SHOT, SHORT— A shot taken in the short area within a radius of twelve feet from the basket. This area is so selected because it is usually considered the backboard shot area; the easy scoring area.
- SHOT, SOUND— A good shot; fundamentally correct.
- SHOT, UNDERHAND— A shot in which the ball starts from a position below the waist.

SLAM BANGERS—	Offensive term meaning players that are careless in their play. Erratic play.
SLEEPER—	A player who ignores defense and waits only for opportunity to score. Player sent down court quickly to catch defense asleep.
SLOW BREAK—	Offensive term meaning a system where team plays slowly and attacks defense after it is organized. A ball-control game.
SPARK PLUG—	A fiery player who instills team with courage and desire to win.
SPECTATOR—	One who watches the game as a non-participant.
SPLIT THE POST—	Two offensive players cutting on either side of a post man.
SPORTSWRITERS—	Gentlemen of the press who report the games to the public and who write about the game.
STALL—	To keep possession of the ball and make no effort to score.
STANCE—	Position of the arms, legs, and body.
STARTS—	A type of footwork. Method of starting to run on the court.
STEAL THE BALL—	To take the ball away from an opponent.
STOPS—	A type of footwork. Method of stopping on the court.
STRATEGY—	Plans, either offensive or defensive, to be used in playing a game.
STYLE OF PLAY—	General pattern or plan that a team employs on offense or defense.
STYLE OF SHOOTING—	The form or style a player employs in shooting, such as the one-hand shot, the under-hand shot, and the hook shot.
SUBSTITUTE—	A player who enters the game to replace a regular player.
SYSTEM—	General offensive or defensive plan a team employs.
TAKE-OFF—	The last position of the feet while in contact with the floor, when a player is in the act of shooting.
TAKE OVER—	A defensive term meaning that a player takes a teammate's defensive assignment when necessary.

TEAMWORK—	Ability of players on a team to play well together.
TENSE UP—	Condition of a player meaning to stiffen. Not relaxed. When a player is not able to act in a well coordinated manner.
TEN-SECOND RULE—	Rule whereby it is necessary to advance the ball from the back court to the front court within ten seconds. Penalty for infraction is loss of ball to opponents.
THREE AGAINST TWO—	A situation in which three offensive players are against two defensive players.
THREE-SECOND RULE—	Rule that makes it illegal for an offensive player to stand in the keyhole area from the foul line to the end line for more than three seconds. Penalty is loss of ball to opponents.
TIE-UP—	When a player causes a held ball to be called while it is in control of an opponent.
TIMING—	Method of jumping at the proper time to retrieve the ball.
TIP-OFF—	A center jump.
TIP OR TIPPING—	The act of tipping the ball with the fingertips; a tap.
TIP-UP—	A goal attempt made by the player tipping the ball toward the basket.
TOSS—	A shot at the basket; also, a pass.
TRAILER MAN—	A player who follows behind the ball as a safety man.
TRAVELING—	Running with the ball; a violation.
TRAVELING SQUAD—	Group of players who are included on basketball trips.
TROUBLE MAKER—	A player who has a poor attitude. One who causes dissension on the squad.
TURN, REVERSE—	A type of footwork where the player turns to go in the opposite direction.
TURN, SIDE—	A type of footwork where the player turns to go to the right or left side.
TWO AGAINST ONE—	A situation in which two offensive players are against one defensive player.
UNDER FIRE—	In major competition.

UNDERSTUDY—	A substitute.
VIOLATION—	Certain infractions of the rules not classed as fouls, such as running with the ball, illegal dribble, kicking the ball, and similar offenses. Penalty for most violations is loss of ball to opponents.
VISITING COURT—	The playing floor of the visiting or traveling team.
WEAVE—	A method of players moving from one position to another so that they exchange positions in a manner resembling a weave.
WHEN CHIPS ARE DOWN—	A period when game is close.
WORK OUT—	A practice.
WORK THE BALL IN—	An offensive plan to get shots in the short area near the basket.
WRIST ACTION—	The ability of a player to use his wrists in a coordinated manner in passing, catching, shooting and similar techniques.
ZONE—	Refers to zone defense.
ZONE 2-1-2—	A zone defense that stations two men near the basket (one on each side), one man in the center, and two men in the outer area.
ZONE 2-3—	A zone defense that stations three men near the basket and two men in the outer area.
ZONE 3-2—	A zone defense that stations two men near the basket (one on each side) and three men in the outer area.
ZONE 1-3-1—	A zone defense that stations one man under the basket, 3 men across the court about even with the free-throw line, and one man in the outer area.

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